Feb. 2010

SERVICE MANUAL ADDENDUM

IC-V80 IC-V80E

CONTENTS

PARTS LIST 1

fineline6

PARTS LIST

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
IC1	1130008351	S.IC LV2105V-TLM-E	B	51.1/28.4
IC2	1110007320	S.IC NJM2591V-TE1-#ZZZB	B	49.5/40.3
IC3	1110006470	S.IC LMV324IPWR	T	29.6/29.6
IC4	1130011770	S.IC CD4066BPWR	T	18.4/28.3
IC5	1110007610	S.IC TPA0211DGNR	B	14.7/41.9
IC7	1130014960	S.IC R1EX24032ATA00A	B	91.5/17.8
IC8	1140015240	S.IC R5F2L3AAANFP	B	79/29.5
IC10	1110007550	S.IC R2A20178NP	B	31.2/34.2
IC11	1110007620	S.IC NJU7704F3-42A-TE1-#ZZZB	B	94.1/24.3
IC12	1180002251	S.IC S-812C50AMC-C3E-G	B	78.8/3.3
IC13	1110003800	S.IC NJM2904V-TE1-#FMZB	B	23/38
Q1	1560001700	S.FET RD07MUS2B-T112	B	29.5/13.1
Q2	1560001241	S.FET RD01MUS1-T113	B	36.4/15.6
Q3	1530003421	S.TRA 2SC5110-O(TE85R,F)	T	39.4/15.9
Q4	1530002920	S.TRA 2SC4226-T1 R25	B	46.3/18.6
Q5	1530002920	S.TRA 2SC4226-T1 R25	B	50/18.6
Q6	1530002920	S.TRA 2SC4226-T1 R25	B	43.5/15
Q7	1530002920	S.TRA 2SC4226-T1 R25	T	49.6/25.5
Q11	1590001650	S.TRA XP4601(TX)	B	67.3/13
Q12	1580000731	S.FET 3SK293(TE85L,F)	B	11.6/25
Q13	1580000731	S.FET 3SK293(TE85L,F)	B	24.2/23.5
Q14	1530002601	S.TRA 2SC4215-O(TE85R,F)	T	47.4/37
Q15	1520000460	S.TRA 2SB1132 T100 R	B	17.9/35.8
Q16	1590003800	S.TRA KTC811U-GR-RTK/P	B	18.7/31.5
Q17	1510001100	S.TRA 2SA1832-GR(TE85R,F)	B	30.1/45.1
Q21	1510001151	S.TRA L2SA1576AST1G <SLVJ>	B	65.9/41.4
Q22	1510001151	S.TRA L2SA1576AST1G <SLVJ>	B	68.9/7.5
Q25	1530002691	S.TRA 2SC4116-GR(TE85R,F)	B	61.8/6.3
Q31	1590004080	S.TRA LDTC144TWT1G <SLVJ>	B	69/20.3
Q37	1590004050	S.TRA LDTA144EET1G <SLVJ>	T	21.2/24.4
Q38	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	88.6/16.3
Q53	1590001650	S.TRA XP4601(TX)	T	48.8/43.7
Q55	1520000840	S.TRA KTA1664Y-RTF/P	B	73.4/8.4
Q56	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	82.7/8.8
Q58	1590001650	S.TRA XP4601(TX)	B	52.5/34.6
Q76	1530002920	S.TRA 2SC4226-T1 R25	B	45.3/11.5
Q77	1590004060	S.TRA LDTC114EET1G <SLVJ>	B	72.8/19.2
Q78	1590003800	S.TRA KTC811U-GR-RTK/P	B	78.5/7.7
Q81	1590001410	S.TRA XP1215(TX)	B	23.5/46.1
Q82	1590004070	S.TRA LDTC144EET1G <SLVJ>	T	40.2/5
Q83	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	58.4/28.4
D1	1750001910	S.DIO HVD144AKRF-E	B	14/13.4
D2	1750001910	S.DIO HVD144AKRF-E	B	7.2/15.5
D3	1750001910	S.DIO HVD144AKRF-E	T	41.1/19.7
D4	1750001910	S.DIO HVD144AKRF-E	T	39.3/19.5
D9	1720000781	S.VAR HVU350BTRF-E	B	8/23.2
D10	1750001810	S.DIO L1SS400T1G <SLVJ>	B	80.1/5.8
D11	1750001780	S.VAR HVB350BYPTL-E	B	18.5/24.2
D13	1750001910	S.DIO HVD144AKRF-E	B	79.7/9.8
D27	1750001820	S.DIO LRB706F-40T1G <SLVJ>	B	66/20.9
D31	1750001810	S.DIO L1SS400T1G <SLVJ>	B	25/34.5
D32	1750001820	S.DIO LRB706F-40T1G <SLVJ>	B	14.9/15.7
D33	1750001820	S.DIO LRB706F-40T1G <SLVJ>	B	18.4/15.7
D34	1790001810	S.VAR AVR-M1005C080MTABB	T	40.6/8.1
D39	1750001810	S.DIO L1SS400T1G <SLVJ>	B	83.5/4.5
D41	1750001810	S.DIO L1SS400T1G <SLVJ>	B	81.9/43.9
D42	1750001810	S.DIO L1SS400T1G <SLVJ>	B	83.1/43.9
D43	1750001810	S.DIO L1SS400T1G <SLVJ>	B	84.3/43.9
D44	1750001810	S.DIO L1SS400T1G <SLVJ>	B	86.7/43.9
D46	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR]	T	59.8/46.4
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-21]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-01]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA-11]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [AUS-21]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-22]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-02]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA-12]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR-02]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [AUS-22]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-23]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-03]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA-13]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [AUS-23]		
D47	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR]	T	59.8/47.6
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-21]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-01]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-22]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-02]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR-02]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-23]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-03]		
D48	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR]	B	85.5/43.9
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-21]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-01]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA-11]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-22]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-02]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA-12]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-23]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-03]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA-13]		

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
D49	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR]	B	87.9/43.9
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-21]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-01]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [AUS-21]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-22]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-02]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [AUS-22]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-23]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-03]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [AUS-23]		
D50	1750001810	S.DIO L1SS400T1G <SLVJ>	B	7.2/20.5
D58	1750001790	S.DIO 1SS390 TE61	B	53.4/10.3
D59	1750000721	S.VAR HVC375BTRF-E	B	50.1/12.1
D60	1750000721	S.VAR HVC375BTRF-E	B	51.6/10.3
D61	1750001190	S.VAR KDV214E RTK/P	B	48.1/14.5
D62	1750001820	S.DIO LRB706F-40T1G <SLVJ>	T	53.5/34.7
FI1	2030000270	MON MCF21R15AB 21.7 MHz (FL-363)		
FI2	2020002410	CER LTM450FW <JJE>		
FI3	2030000270	MON MCF21R15AB 21.7 MHz (FL-363)		
X1	6050013080	S.XTA CR-901 TTS14VSB-A4 21.250 MHz	T	52.2/30.3
X2	6050013060	S.XTA CR-899(HC-49US/9.8304 MHz) <JJE>	B	79.5/15.6
X3	6070000300	S.DIS JTBM450CX24 <JJE>	B	58.3/35.9
L1	6200012460	S.COI 0.30-1.7-8TL 54N <COMO>	B	11.7/7
L2	6200012470	S.COI 0.30-1.7-7TL 45.3N <COMO>	B	11.1/11.1
L4	6200012470	S.COI 0.30-1.7-7TL 45.3N <COMO>	B	17.3/11.2
L5	6200012980	S.COI 0.40-1.4-5TR 18.3N <COMO>	B	22.6/15.9
L6	6200013790	S.COI MLK1005S47NJT	B	34.2/11.2
L7	6200013800	S.COI MLK1005S39NJT	T	38.9/13.9
L8	6200013750	S.COI MLK1005SR10JT	B	44.9/19.9
L14	6200013760	S.COI MLK1005S82NJT	B	53.8/18.7
L15	6200012460	S.COI 0.30-1.7-8TL 54N <COMO>	B	10.6/15.3
L16	6200012460	S.COI 0.30-1.7-8TL 54N <COMO>	B	10.9/19.1
L18	6200011650	S.COI LQW18AN68NG00D	B	13.6/26.6
L19	6200010910	S.COI LQW18AN56NG00D	B	20.4/24.3
L20	6200003281	S.COI NLV25T-2R2J	B	26.9/25.2
L21	6200013800	S.COI MLK1005S39NJT	B	29.8/22
L24	6200003711	S.COI NLV25T-2R7J	T	14.3/10.1
L29	6200013750	S.COI MLK1005SR10JT	B	27.9/20.3
L32	6200012970	S.COI 0.30-0.91-4TR 8.6N <COMO>	B	22.9/12.9
L33	6200012390	S.COI 0.30-0.92-3TR 5.8N <COMO>	B	20.4/12.9
L35	6200003281	S.COI NLV25T-2R2J	T	50/38.1
L44	6200011770	S.COI LQW18ANR10G00D	B	49.4/10.9
L45	6200011590	S.COI LQW18AN39NG00D	B	48.7/9
L46	6200001981	S.COI NLV25T-1R0J	B	51.8/14.2
R1	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	10.9/11.9
R4	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	37.3/16.1
R5	7030007250	S.RES ERJ2GEJ 220 X (22)	B	31.6/9.3
R6	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	80.5/12.1
R7	7030005590	S.RES ERJ2GEJ 680 X (68)	B	37.9/11.9
R8	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	80/10.9
R9	7410001130	S.ARR EXB28V102JX	B	92.5/39.2
R10	7030004980	S.RES ERJ2GEJ 101 X (100)	T	38.3/17.9
R11	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	77.6/9.8
R12	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	36.9/14
R13	7030005530	S.RES ERJ2GEJ 100 X (10)	T	37.8/12.6
R14	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	41.7/17.5
R15	7030004980	S.RES ERJ2GEJ 101 X (100)	T	41.1/15.9
R16	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	74.1/3.9
R17	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	49.5/23.8
R18	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	46.3/20.3
R19	7030007280	S.RES ERJ2GEJ 331 X (330)	B	44.7/16.8
R20	7030005080	S.RES ERJ2GEJ 823 X (82K)	B	48.7/16.8
R21	7030007280	S.RES ERJ2GEJ 331 X (330)	B	51.4/19.9
R22	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	43.7/13.3
R23	7030005010	S.RES ERJ2GEJ 681 X (680)	B	43.8/17.7
R24	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	48.5/27.3
R26	7030004980	S.RES ERJ2GEJ 101 X (100)	T	48.2/23.6
R29	7030012260	S.RES ERJ2RKD 4703X (470K)	B	76.6/6.1
R30	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	69.1/13.2
R31	7030010010	S.RES ERJ2RKF 334 X (330K)	B	76.6/4.5
R33	7030009280	S.RES ERJ2GEJ 391 X	B	47.3/29.6
R35	7030004980	S.RES ERJ2GEJ 101 X (100)	B	47.6/30.8
R41	7030004980	S.RES ERJ2GEJ 101 X (100)	B	49.4/23.1
R44	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	35.3/31.2
R48	7030008290	S.RES ERJ2GEJ 183 X (18K)	T	48.4/33.9
R49	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	49.2/34.8
R50	7030005170	S.RES ERJ2GEJ 474 X (470K)	T	48.4/33
R51	7030004980	S.RES ERJ2GEJ 101 X (100)	T	25.1/26.4
R52	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	25.1/28.1
R53	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	23.3/28.4
R54	7030008300	S.RES ERJ2GEJ 184 X (180K)	T	24.6/29.3
R57	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	9/27.1
R59	7030008280	S.RES ERJ2GEJ 271 X (270)	B	13.8/24.4
R61	7030005530	S.RES ERJ2GEJ 100 X (10)	B	11.2/28.3
R64	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	18.8/22
R66	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	19.7/22
R68	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	37.3/19.5
R69	7030004980	S.RES ERJ2GEJ 101 X (100)	T	35.7/19.5
R70	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	23.4/21.3

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

fineline6

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R71	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	25.2/25.6
R72	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	22.1/23.4
R73	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	23.4/25.6
R74	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	24.3/25.6
R75	7030004990	S.RES ERJ2GEJ 221 X (220)	B	26.1/21.3
R77	7030004980	S.RES ERJ2GEJ 101 X (100)	B	29/26
R79	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	41.7/34.6
R80	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	47.4/38.8
R81	7030004980	S.RES ERJ2GEJ 101 X (100)	T	52/39.6
R82	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	55.8/39.6
R83	7030005000	S.RES ERJ2GEJ 471 X (470)	B	54.3/43
R84	7030009280	S.RES ERJ2GEJ 391 X	T	55.2/40.2
R85	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	45/40.2
R86	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	47/43.6
R87	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	44.6/44.5
R88	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	44.6/43.6
R90	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	55.6/40.5
R91	7030005000	S.RES ERJ2GEJ 471 X (470)	T	46.2/40
R93	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	31.2/35.6
R94	7030005160	S.RES ERJ2GEJ 105 X (1M)	T	34/30.4
R95	7030007310	S.RES ERJ2GEJ 155 X (1.5M)	T	32.8/33.8
R97	7030010040	S.RES ERJ2GEJ-JPW	T	34.9/27
R98	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	35.8/27.2
R101	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	83.3/11.6
R102	7030005530	S.RES ERJ2GEJ 100 X (10)	B	75.7/18.7
R104	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	28.9/30.3
R105	7030005000	S.RES ERJ2GEJ 471 X (470)	T	23.3/31.7
R107	7030005100	S.RES ERJ2GEJ 154 X (150K)	T	36.7/27.2
R108	7030005230	S.RES ERJ2GEJ 334 X (330K)	T	24.2/31.7
R112	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	28.2/31.5
R114	7030008290	S.RES ERJ2GEJ 183 X (18K)	T	31.6/25.1
R115	7030005310	S.RES ERJ2GEJ 124 X (120K)	T	32.5/25.1
R117	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	33.6/26.3
R120	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	15.1/30.3
R121	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	18.2/29.7
R122	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	16.9/32
R123	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	16.9/30.4
R126	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	18.7/40.4
R127	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	14.3/46
R129	7030010040	S.RES ERJ2GEJ-JPW	B	10.3/45.2
R130	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	31.9/45
R131	7030005000	S.RES ERJ2GEJ 471 X (470)	B	27.6/43.4
R132	7030005000	S.RES ERJ2GEJ 471 X (470)	B	26/43.4
R133	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	30/43.4
R134	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	31.4/43.8
R135	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	30.1/30.5
R136	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	32/31
R137	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	27/33.1
R138	7030008310	S.RES ERJ2GEJ 564 X (560K)	B	27/34
R139	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	69/41.9
R141	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	68.9/10.2
R142	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	79/40.6
R144	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	40.2/6.9
R148	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	91.5/24.3
R150	7030005000	S.RES ERJ2GEJ 471 X (470)	B	29.7/37.5
R155	7030005570	S.RES ERJ2GEJ 820 X (82)	B	64/5.6
R159	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	34.4/29
R161	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	16.8/15.9
R162	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	18.4/14.8
R163	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	T	18.4/15.7
R164	7030008280	S.RES ERJ2GEJ 271 X (270)	T	16.3/7.9
R169	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	36.9/31.2
R174	7030012300	S.RES ERJ2RKF 1502X (15K)	B	69.2/22.3
R176	7030008410	S.RES ERJ2GEJ 392 X (3.9K)	T	32.1/36.5
R177	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	34.9/36.9
R181	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	54.5/36.5
R182	7510001661	S.THR NTCG16 4LH 473JT	T	55.8/34
R184	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	46/29.8
R187	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	15.9/24.6
R193	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	91.1/28.9
R194	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	90.6/27.6
R195	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	89.7/26.8
R196	7030006610	S.RES ERJ2GEJ 394 X (390K)	B	90.6/25.2
R204	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	64/6.6
R205	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	62.2/8.3
R206	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	20.6/41.5
R207	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	20.1/39.6
R208	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	22.8/42.5
R209	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	20.6/44.7
R210	7030008410	S.RES ERJ2GEJ 392 X (3.9K)	T	22.7/25.3
R211	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	25.6/41.3
R212	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	22/33.4
R213	7030007320	S.RES ERJ2GEJ 225 X (2.2M)	B	23.6/31.6
R214	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	22/31.6
R215	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	23.6/33.4
R216	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	25.9/37.5
R217	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	26.4/38.7
R218	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	21.5/43.8
R219	7030008370	S.RES ERJ2GEJ 561 X (560)	B	22.7/44.3
R221	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	21.5/45.5
R222	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	10.8/27.1
R224	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	87.4/18.7
R225	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	90.7/23.1
R227	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	84.9/18.7
R228	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	90.7/22.2
R235	7030007320	S.RES ERJ2GEJ 225 X (2.2M)	B	89.7/25.2
R238	7410001130	S.ARR EXB28V102JX	B	83.7/40.8
R244	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	52.5/40.5
R245	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	18.7/24.5
R246	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	13.1/30.7
R251	7030005230	S.RES ERJ2GEJ 334 X (330K)	T	26.8/26
R252	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	10.8/23
R255	7030004980	S.RES ERJ2GEJ 101 X (100)	B	35.1/12.2
R257	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	22.1/32.8
R258	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	9.9/27.1

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R259	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	11.7/23
R260	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	68.9/9.3
R261	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	67.8/41.5
R262	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	35.8/23.7
R266	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	24/34.5
R306	7030007280	S.RES ERJ2GEJ 331 X (330)	B	50.3/16.8
R307	7030009280	S.RES ERJ2GEJ 391 X	B	45.4/14.6
R308	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	42.5/19.1
R318	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	53.5/41.7
R319	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	52.3/42.4
R320	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	49/41.6
R321	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	49.9/41.6
R323	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	51.1/44.1
R324	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	T	46.6/44.4
R325	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	46.6/43.5
R326	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	55.1/41.7
R327	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	53.5/44.4
R330	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	83.7/5.5
R331	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	76.6/7.7
R332	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	80.7/8.5
R333	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	54.8/44.4
R334	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.3/46.5
R336	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	51.1/41.4
R337	7030012220	S.RES ERJ2GEJ 185 X (1.8M)	B	66.8/15
R338	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	57.4/46.5
R340	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	30.5/10.5
R341	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	30.7/6.6
R346	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	77.3/18.7
R351	7030005570	S.RES ERJ2GEJ 820 X (82)	B	46.7/32
R352	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	52.7/32.6
R353	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	53.3/25.2
R355	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	50.8/34.3
R357	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	39.2/10.5
R358	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	38.7/9.3
R360	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	B	52.8/36.4
R361	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	54.3/32.6
R433	7030004970	S.RES ERJ2GEJ 470 X (47)	B	47.5/12.5
R434	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	47.3/11.3
R435	7030009270	S.RES ERJ2GEJ 821 X (820)	B	44.7/8.5
R436	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	46.5/9.2
R437	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	50.5/8.6
R438	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	52.9/8.9
R439	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	53.8/8.9
R440	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	49.6/13.2
R441	7030007320	S.RES ERJ2GEJ 225 X (2.2M)	B	49.2/14.4
R442	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	45.8/24.9
R443	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	46.1/26.1
R444	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	44.9/27.4
R445	7410001130	S.ARR EXB28V102JX	B	55/27.5
R448	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	81/18.7
R449	7410001130	S.ARR EXB28V102JX	B	90/39.2
R450	7030010040	S.RES ERJ2GEJ-JPW	T	27.8/47.8
R451	7030010040	S.RES ERJ2GEJ-JPW	T	27.7/41.4
R452	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	16.6/32.5
R453	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	16.6/31.6
R455	7030009280	S.RES ERJ2GEJ 391 X	B	53.8/16.7
R456	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	57.7/31.9
C1	4030017390	S.CER C1005 CH 1H 180J-T	B	9.3/5.5
C2	4030017560	S.CER C1005 CH 1H 2R5B-T	B	11.4/8.9
C4	4030017580	S.CER C1005 CH 1H 060C-T	B	13/11.1
C6	4030017780	S.CER C1005 JB 1H 472K-T	B	90.3/32.5
C7	4030017780	S.CER C1005 JB 1H 472K-T	B	90.3/31.6
C8	4030017460	S.CER C1005 JB 1H 102K-T	B	11.5/13.4
C9	4030017780	S.CER C1005 JB 1H 472K-T	B	90.3/30.7
C10	4030017460	S.CER C1005 JB 1H 102K-T	T	16.8/16.8
C11	4030017780	S.CER C1005 JB 1H 472K-T	B	90.3/29.8
C12	4030016930	S.CER C1005 JB 1A 104K-T	B	93.5/26.5
C13	4030017460	S.CER C1005 JB 1H 102K-T	B	30.5/8.4
C14	4030017460	S.CER C1005 JB 1H 102K-T	B	36.1/11.2
C15	4030017430	S.CER C1005 CH 1H 101J-T	B	33.5/12.2
C16	4030016930	S.CER C1005 JB 1A 104K-T	B	79.6/12.1
C17	4030017460	S.CER C1005 JB 1H 102K-T	B	39.6/9.3
C18	4030017460	S.CER C1005 JB 1H 102K-T	T	24.7/25.2
C19	4030017490	S.CER C1608 JB 1A 105K-T	T	33/11.6
C20	4030017460	S.CER C1005 JB 1H 102K-T	B	19.4/18.4
C22	4030017430	S.CER C1005 CH 1H 101J-T	T	39.3/12.6
C23	4030017460	S.CER C1005 JB 1H 102K-T	T	37.3/17
C24	4030017460	S.CER C1005 JB 1H 102K-T	T	35.7/13.5
C25	4030017650	S.CER C1005 CH 1H 270J-T	T	40.5/17.8
C26	4030017460	S.CER C1005 JB 1H 102K-T	T	42/15.9
C27	4030017390	S.CER C1005 CH 1H 180J-T	B	43.7/20.3
C28	4030017630	S.CER C1005 CH 1H 120J-T	B	45.8/15.8
C29	4030017460	S.CER C1005 JB 1H 102K-T	B	46.3/16.8
C30	4030017400	S.CER C1005 CH 1H 220J-T	B	52.2/18.7
C31	4030017380	S.CER C1005 CH 1H 050B-T	B	47.5/16.6
C32	4030017460	S.CER C1005 JB 1H 102K-T	B	49.5/20.3
C33	4030017460	S.CER C1005 JB 1H 102K-T	B	43.1/16.8
C36	4030016930	S.CER C1005 JB 1A 104K-T	B	78.9/18.7
C37	4030016930	S.CER C1005 JB 1A 104K-T	B	72.9/4.3
C38	4030017460	S.CER C1005 JB 1H 102K-T	B	78.7/12.1
C40	4030017460	S.CER C1005 JB 1H 102K-T	T	36.1/15.6
C41	4030017620	S.CER C1005 CH 1H 100C-T	B	33.5/13.4
C46	4030016790	S.CER C1005 JB 1E 103K-T	B	36.7/12.2
C48	4550006250	S.TAN TEESVA 1A 106M8R	B	47/26.6
C50	4030019490	S.CER C2012 JB 1A 106K-T	B	68.2/15.9
C52	4030017400	S.CER C1005 CH 1H 220J-T	B	7.9/13.8
C54	4030017460	S.CER C1005 JB 1H 102K-T	B	51.1/32.6
C55	4030016790	S.CER C1005 JB 1E 103K-T	B	50.1/24.2
C60	4030017460	S.CER C1005 JB 1H 102K-T	B	48.2/23.6
C61	4030017630	S.CER C1005 CH 1H 120J-T	B	54.1/19.9
C62	4030017610	S.CER C1005 CH 1H 090C-T	B	53.2/19.9
C64	4030017620	S.CER C1005 CH 1H 100C-T	T	53.6/26.4
C70	4030017460	S.CER C1005 JB 1H 102K-T	T	49.6/33.6

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

fineline6

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C71	4030018860	S.CER C1005 JB 0J 105K-T	T	46.8/34.8
C72	4030018860	S.CER C1005 JB 0J 105K-T	T	46.8/33.9
C73	4030016930	S.CER C1005 JB 1A 104K-T	T	24.2/28.1
C75	4030016930	S.CER C1005 JB 1A 104K-T	T	27.7/26
C76	4030017640	S.CER C1005 CH 1H 150J-T	B	13.1/16.7
C79	4030017570	S.CER C1005 CH 1H 040B-T	B	8.9/20
C80	4030017340	S.CER C1005 CH 1H 010B-T	B	13/20.9
C81	4030017430	S.CER C1005 CH 1H 101J-T	B	9.4/24.4
C82	4030017460	S.CER C1005 JB 1H 102K-T	B	9/28.7
C87	4030016790	S.CER C1005 JB 1E 103K-T	B	13.5/23
C88	4030017460	S.CER C1005 JB 1H 102K-T	B	14.7/23.4
C89	4030017460	S.CER C1005 JB 1H 102K-T	B	15/25.8
C90	4030017460	S.CER C1005 JB 1H 102K-T	B	15/24.6
C91	4030017350	S.CER C1005 CH 1H 020B-T	B	16.8/24.6
C92	4030017430	S.CER C1005 CH 1H 101J-T	B	17.9/22
C93	4030017460	S.CER C1005 JB 1H 102K-T	B	18.3/20.8
C94	4030017530	S.CER C1005 CH 1H 0R5B-T	B	18.5/26.2
C95	4030017460	S.CER C1005 JB 1H 102K-T	B	20.9/21.5
C96	4030017430	S.CER C1005 CH 1H 101J-T	B	20.9/22.4
C97	4030017380	S.CER C1005 CH 1H 050B-T	B	21.5/24.6
C98	4030017380	S.CER C1005 CH 1H 050B-T	B	22.4/24.6
C99	4030017460	S.CER C1005 JB 1H 102K-T	T	36.8/18.3
C100	4030017510	S.CER C1005 CH 1H 680J-T	B	31/22.5
C101	4030017500	S.CER C1005 CH 1H 560J-T	B	28.6/22.2
C102	4030017640	S.CER C1005 CH 1H 150J-T	B	29.2/21
C103	4030017460	S.CER C1005 JB 1H 102K-T	B	29.9/24.2
C104	4030017460	S.CER C1005 JB 1H 102K-T	B	24.3/21.3
C106	4030017400	S.CER C1005 CH 1H 220J-T	B	28.7/24.6
C107	4030017460	S.CER C1005 JB 1H 102K-T	B	29.9/25.1
C109	4030016930	S.CER C1005 JB 1A 104K-T	T	45.5/37.2
C110	4030017380	S.CER C1005 CH 1H 050B-T	B	39.7/28.3
C111	4030016790	S.CER C1005 JB 1E 103K-T	T	47.1/40
C112	4030017460	S.CER C1005 JB 1H 102K-T	B	53.9/44.4
C113	4030017460	S.CER C1005 JB 1H 102K-T	B	53/44.4
C114	4030017040	S.CER C1005 JB 1A 333K-T	B	52.1/44.4
C115	4030017460	S.CER C1005 JB 1H 102K-T	B	27.3/21.7
C116	4030017690	S.CER C1005 CH 1H 121J-T	B	54.4/40.8
C117	4030017460	S.CER C1005 JB 1H 102K-T	B	54.2/39.6
C118	4030016790	S.CER C1005 JB 1E 103K-T	B	43.8/40.7
C119	4030018860	S.CER C1005 JB 0J 105K-T	B	43.8/41.6
C120	4030016930	S.CER C1005 JB 1A 104K-T	B	48.6/43.6
C121	4030017440	S.CER C1005 CH 1H 221J-T	B	47/44.5
C122	4030017440	S.CER C1005 CH 1H 221J-T	B	45.8/44.1
C123	4030017460	S.CER C1005 JB 1H 102K-T	B	35.3/33.9
C124	4030016790	S.CER C1005 JB 1E 103K-T	T	32.8/35.6
C125	4030017760	S.CER C1005 JB 1H 222K-T	T	31.6/34.2
C126	4030017760	S.CER C1005 JB 1H 222K-T	T	32.8/34.7
C127	4030017460	S.CER C1005 JB 1H 102K-T	T	49/40.2
C128	4030016930	S.CER C1005 JB 1A 104K-T	B	27/31.8
C131	4030016790	S.CER C1005 JB 1E 103K-T	T	20.5/31.9
C132	4030018240	S.CER C1005 JB 1H 562K-T	T	25.6/33.6
C133	4030016930	S.CER C1005 JB 1A 104K-T	T	23.5/33.3
C134	4030017440	S.CER C1005 CH 1H 221J-T	T	25.1/31.7
C135	4030017450	S.CER C1005 JB 1H 271K-T	T	32/26.3
C136	4030018240	S.CER C1005 JB 1H 562K-T	T	35.2/25.1
C137	4030017040	S.CER C1005 JB 1A 333K-T	T	34.3/25.1
C138	4030017460	S.CER C1005 JB 1H 102K-T	B	12.6/23
C139	4030018860	S.CER C1005 JB 0J 105K-T	B	16/32
C141	4030019490	S.CER C2012 JB 1A 106K-T	B	28.6/28.9
C143	4030017460	S.CER C1005 JB 1H 102K-T	B	17.5/5.5
C144	4030017460	S.CER C1005 JB 1H 102K-T	B	93/22.6
C145	4030019490	S.CER C2012 JB 1A 106K-T	B	17.3/40.6
C147	4030016950	S.CER C1005 JB 1A 473K-T	B	31.9/45.9
C148	4030017460	S.CER C1005 JB 1H 102K-T	T	40.1/3.4
C150	4030016950	S.CER C1005 JB 1A 473K-T	B	11.9/40.1
C151	4030018900	S.CER C1005 JB 0J 474K-T	B	19.2/41.6
C152	4030016930	S.CER C1005 JB 1A 104K-T	B	10.3/40.1
C153	4520000020	S.NIO NOJC227M006	T	12/42.5
C154	4030019490	S.CER C2012 JB 1A 106K-T	B	27.2/41.3
C156	4520000020	S.NIO NOJC227M006	T	19.6/36.6
C157	4030017460	S.CER C1005 JB 1H 102K-T	B	33.9/42.2
C158	4030017460	S.CER C1005 JB 1H 102K-T	B	29.7/27.2
C161	4030016790	S.CER C1005 JB 1E 103K-T	B	69/41
C162	4030016790	S.CER C1005 JB 1E 103K-T	B	67.3/10.2
C165	4030017460	S.CER C1005 JB 1H 102K-T	T	15.8/46.4
C166	4030017460	S.CER C1005 JB 1H 102K-T	B	26/47.9
C169	4030017460	S.CER C1005 JB 1H 102K-T	T	28/43
C170	4030019490	S.CER C2012 JB 1A 106K-T	B	28.1/45.4
C171	4030016930	S.CER C1005 JB 1A 104K-T	B	12.8/38.3
C173	4510009870	S.ELE 10 CE 100 LD	T	8.8/28.3
C174	4030019490	S.CER C2012 JB 1A 106K-T	B	67.8/43.9
C179	4030016790	S.CER C1005 JB 1E 103K-T	T	28.9/26.3
C180	4030017460	S.CER C1005 JB 1H 102K-T	B	48.6/44.5
C181	4030019490	S.CER C2012 JB 1A 106K-T	T	54.6/38.8
C182	4030016930	S.CER C1005 JB 1A 104K-T	B	43.6/37.4
C183	4030016930	S.CER C1005 JB 1A 104K-T	B	42.7/42.8
C193	4030017620	S.CER C1005 CH 1H 100C-T	B	75.6/12.5
C194	4030017640	S.CER C1005 CH 1H 150J-T	B	83.3/12.5
C195	4030017400	S.CER C1005 CH 1H 220J-T	B	81.7/11.5
C197	4030016930	S.CER C1005 JB 1A 104K-T	B	83/6.7
C199	4030016930	S.CER C1005 JB 1A 104K-T	B	82.6/18.7
C204	4030017460	S.CER C1005 JB 1H 102K-T	T	14.7/7.9
C205	4030017460	S.CER C1005 JB 1H 102K-T	B	15/11.7
C209	4030018860	S.CER C1005 JB 0J 105K-T	B	20.2/45.9
C210	4030016930	S.CER C1005 JB 1A 104K-T	B	20.6/43.1
C212	4030016790	S.CER C1005 JB 1E 103K-T	T	35.8/28.8
C213	4030019620	S.CER GRM188B31C225KE14D	T	35.7/30.2
C216	4030016950	S.CER C1005 JB 1A 473K-T	B	88.6/18.3
C217	4030016930	S.CER C1005 JB 1A 104K-T	T	33.7/36.8
C219	4030016790	S.CER C1005 JB 1E 103K-T	B	86.1/18.3
C220	4030016960	S.CER C1005 JB 1E 183K-T	B	24.4/42.5
C221	4030016960	S.CER C1005 JB 1E 183K-T	B	24.7/41.3
C222	4030017730	S.CER C1005 JB 1H 471K-T	B	22/32.5
C223	4030016930	S.CER C1005 JB 1A 104K-T	B	25.5/38.7
C224	4030016930	S.CER C1005 JB 1A 104K-T	B	20.5/38.4

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C226	4030017760	S.CER C1005 JB 1H 222K-T	B	23.6/32.5
C230	4030017030	S.CER C1005 JB 1A 273K-T	B	94.8/26.5
C232	4030016930	S.CER C1005 JB 1A 104K-T	T	54.6/37.4
C236	4030016790	S.CER C1005 JB 1E 103K-T	B	29.3/38.7
C241	4030016930	S.CER C1005 JB 1A 104K-T	T	47.8/26
C244	4030016790	S.CER C1005 JB 1E 103K-T	B	30.2/38.7
C245	4030016790	S.CER C1005 JB 1E 103K-T	B	93.8/20.3
C249	4030016790	S.CER C1005 JB 1E 103K-T	T	47.2/41.6
C251	4030017460	S.CER C1005 JB 1H 102K-T	B	18.6/17.5
C252	4030017460	S.CER C1005 JB 1H 102K-T	B	16.6/16.3
C277	4030017650	S.CER C1005 CH 1H 270J-T	B	9.4/25.6
C278	4030017640	S.CER C1005 CH 1H 150J-T	B	16.1/9
C280	4030017460	S.CER C1005 JB 1H 102K-T	B	19.9/10.2
C281	4030007030	S.CER C1608 CH 1H 150J-T	B	20.2/8.5
C282	4030017460	S.CER C1005 JB 1H 102K-T	B	78.1/5.7
C283	4030017460	S.CER C1005 JB 1H 102K-T	T	12.8/31.5
C285	4030007110	S.CER C1608 CH 1H 680J-T	B	21.4/9.4
C287	4030017640	S.CER C1005 CH 1H 150J-T	B	18.5/9
C289	4030017460	S.CER C1005 JB 1H 102K-T	B	25/15.9
C290	4030017340	S.CER C1005 CH 1H 010B-T	B	18.3/13.4
C292	4030017340	S.CER C1005 CH 1H 010B-T	B	16.1/13.4
C293	4030016930	S.CER C1005 JB 1A 104K-T	B	55/29.7
C298	4030019490	S.CER C2012 JB 1A 106K-T	T	30.5/12.9
C300	4030017460	S.CER C1005 JB 1H 102K-T	B	52.3/19.9
C301	4030017460	S.CER C1005 JB 1H 102K-T	B	67.3/11.2
C303	4030017460	S.CER C1005 JB 1H 102K-T	B	50.9/44
C304	4030016950	S.CER C1005 JB 1A 473K-T	T	24/35.4
C368	4030017530	S.CER C1005 CH 1H 0R5B-T	B	43.2/10.6
C369	4030017040	S.CER C1005 JB 1A 333K-T	T	51.1/42.3
C370	4030017760	S.CER C1005 JB 1H 222K-T	T	53.2/42.9
C372	4030017040	S.CER C1005 JB 1A 333K-T	T	52.3/44
C373	4030017790	S.CER C1005 JB 1H 682K-T	T	54.1/42.9
C374	4030017760	S.CER C1005 JB 1H 222K-T	T	55/44
C376	4030017460	S.CER C1005 JB 1H 102K-T	B	82.8/3.1
C377	4030019490	S.CER C2012 JB 1A 106K-T	B	85.3/6.5
C378	4030016930	S.CER C1005 JB 1A 104K-T	B	83.9/6.7
C379	4030017460	S.CER C1005 JB 1H 102K-T	B	81.6/7.4
C380	4030019490	S.CER C2012 JB 1A 106K-T	B	72.6/12.5
C381	4030019490	S.CER C2012 JB 1A 106K-T	B	81.4/3.5
C385	4030017770	S.CER C1005 JB 1H 332K-T	B	54.4/45.6
C386	4030017720	S.CER C1005 JB 1H 331K-T	B	56.5/46.5
C389	4030017460	S.CER C1005 JB 1H 102K-T	T	49.7/27.6
C391	4030016930	S.CER C1005 JB 1A 104K-T	T	52.1/36.6
C392	4550007480	S.TAN F930J106MAABMA	B	44.6/33.2
C393	4550006110	S.TAN TEESVB2 0J 336M8R	B	48.4/34.8
C394	4030017460	S.CER C1005 JB 1H 102K-T	T	50.8/35.2
C395	4030016930	S.CER C1005 JB 1A 104K-T	T	52.1/37.5
C397	4030017460	S.CER C1005 JB 1H 102K-T	T	52.4/26
C398	4030019490	S.CER C2012 JB 1A 106K-T	B	66.7/5.6
C456	4030017400	S.CER C1005 CH 1H 220J-T	B	45.6/8.5
C457	4030017650	S.CER C1005 CH 1H 270J-T	B	45.3/9.7
C458	4030017460	S.CER C1005 JB 1H 102K-T	B	47.4/9.2
C459	4030017460	S.CER C1005 JB 1H 102K-T	B	47.1/14.1
C460	4030017600	S.CER C1005 CH 1H 080C-T	B	47.3/10.4
C461	4030017460	S.CER C1005 JB 1H 102K-T	B	50/9.8
C462	4030017460	S.CER C1005 JB 1H 102K-T	B	54.7/8.9
C463	4030017460	S.CER C1005 JB 1H 102K-T	B	74.3/19.3
C464	4030017530	S.CER C1005 CH 1H 0R5B-T	B	48.4/12.5
C465	4030017460	S.CER C1005 JB 1H 102K-T	B	50.1/15.1
C466	4030016930	S.CER C1005 JB 1A 104K-T	B	71.2/18.7
C471	4030016930	S.CER C1005 JB 1A 104K-T	T	44.9/25.8
C775	4030017460	S.CER C1005 JB 1H 102K-T	T	51.5/25.3
C776	4030017780	S.CER C1005 JB 1H 472K-T	B	90.3/35.2
C777	4030017780	S.CER C1005 JB 1H 472K-T	B	90.3/34.3
C778	4030018890	S.CER C1005 JB 0J 224K-T	B	91.8/28
C779	4030018890	S.CER C1005 JB 0J 224K-T	B	91.8/27.1
C780	4030018890	S.CER C1005 JB 0J 224K-T	B	91.5/25.9
C782	4030016950	S.CER C1005 JB 1A 473K-T	B	19.6/38.4
C783	4030016970	S.CER C1005 JB 1E 223K-T	T	18/32
C784	4550000270	S.TAN TEESVA 1E 474M8R	B	54.1/13.7
C785	4030017460	S.CER C1005 JB 1H 102K-T	B	58.9/29.9
C786	4030016790	S.CER C1005 JB 1E 103K-T	B	57.7/30.3
C787	4030017650	S.CER C1005 CH 1H 270J-T	B	13.6/9.6
C788	4030017640	S.CER C1005 CH 1H 150J-T	B	14/10.8
J2	6450000131	CON HSJ1102-018540		
J3	6510025880	CON TC38-108-01 <CFE>		
J6	6510021901	S.CON BM02B-ASRS-TF(LF)(SN)	T	27.6/36.4
DS1	5030003270	LCD TAK-35426 FX3254 <ITAK>		
DS2	5040003500	S.LED HT-191 UYG-K828 <SHO>	T	48.3/4.3
DS3	5040003500	S.LED HT-191 UYG-K828 <SHO>	T	53/4.3
MC1	7700002940	MIC EM6027P-45C33-G <HOR>		
S3	2260001900	SWI SW-149 (SKHLLD)		
S801	7600000210	ENC TP70N00E20-15F-1903		
EP2	8930080320	LCD SRCN-3254-SP-N-W (SHJ)		
EP4	6910012350	S.BEA MMZ1608Y 102BT	T	34.2/11.6
EP5	6910018460	S.BEA MMZ1005Y102C-T	B	21.8/48.1
EP6	6910014640	S.BEA MPZ2012S221A-T	B	21.9/18.4
EP10	6910018460	S.BEA MMZ1005Y102C-T	B	34.9/43.5
EP11	6910018460	S.BEA MMZ1005Y102C-T	B	19.3/45
EP12	6910018460	S.BEA MMZ1005Y102C-T	T	54.7/32.5

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

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ICOM

SERVICE MANUAL

VHF TRANSCEIVER

IC-V80
IC-V80E

S-14618XZ-C1
Nov. 2009

Icom Inc.

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INTRODUCTION

This service manual describes the latest technical information for the **IC-V80/IC-V80E** VHF TRANSCEIVER, at the time of publication.

MODEL	VERSION	SUPPLIED BATTERY PACK	SUPPLIED BATTERY CHARGER
V80	USA	BP-263	–
	EXP		
	USA-11	BP-264	BC-191
	AUS-21		
	EXP-11		
	EXP-21		
	USA-12		BC-192
	KOR-02		
	AUS-22		
	EXP-12		
	EXP-22		
	USA-13	BP-265	BC-193
	AUS-23		
	EXP-13		
	EXP-23		
V80E	EUR	BP-263	–
	CHN	–	
	EUR-21	BP-264	BC-191
	UK-01		
	EUR-22		BC-192
	UK-02		
	EUR-23	BP-265	BC-193
	UK-03		

To upgrade quality, any electrical or mechanical parts and internal circuits are subject to change without notice or obligation.

(IC-V80)

CAUTION

NEVER connect the transceiver to an AC outlet or to a DC power supply that uses more than specified. This will ruin the transceiver.

DO NOT expose the transceiver to rain, snow or any liquids.

DO NOT reverse the polarities of the power supply when connecting the transceiver.

DO NOT apply an RF signal of more than 20 dBm (100 mW) to the antenna connector. This could damage the transceiver's front-end.

ORDERING PARTS

Be sure to include the following four points when ordering replacement parts:

1. 10-digit Icom part number
2. Component name
3. Equipment model name and unit name
4. Quantity required

<ORDER EXAMPLE>

1130008351	LV2105V-TLM-E	IC-V80	MAIN UNIT	5 pieces
8210026120	3254 FRONT PANEL	IC-V80E	CHASSIS	10 pieces

Addresses are provided on the inside back cover for your convenience.

REPAIR NOTES

1. Make sure that the problem is internal before disassembling the transceiver.
2. **DO NOT** open the transceiver until the transceiver is disconnected from its power source.
3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool **MUST** be used for all adjustments.
5. **DO NOT** keep power ON for a long time when the transceiver is defective.
6. **DO NOT** transmit power into a Standard Signal Generator or a Sweep Generator.
7. **ALWAYS** connect a 50 dB to 60 dB attenuator between the transceiver and a Deviation Meter or Spectrum Analyzer when using such test equipment.
8. **READ** the instructions of test equipment throughly before connecting a test equipment to the transceiver.

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SECTION 1 SPECIFICATIONS

■ General

• Frequency coverage : (unit: MHz)

Version	TX	RX
U.S.A. AUS	144–148	136–174*
CHN EXP	136–174*	136–174*
EUR UK KOR	144–146	144–146

* Guaranteed: Only 144–148 MHz range

- Mode : FM, FM-N
- Number of memory channels : 207 (incl. 6 scan edges and 1 Call channel)
- Usable temperature range : –20°C to +60°C; –4°F to +140°F
- Tuning steps : 5, 10, 12.5, 15, 20, 25, 30 and 50 kHz
- Frequency stability : ±2.5 ppm (–20°C to +60°C; –4°F to +140°F)
- Power supply : Icom specified battery pack/case
- Current drain (at 7.2 V DC: typical)
  - Transmit at 5.5 W (High) : 1.4 A
  - at 2.5 W (Mid.) 0.9 A
  - at 0.5 W (Low) 0.6 A
  - Receive standby : 65 mA
  - power save 20 mA
  - max. audio 310 mA (internal speaker)
  - 180mA (external speaker)
- Antenna connector : BNC (50 Ω)
- Dimensions (projections not included) : 58(W)×112(H)×30(D) mm; $2^{9}/_{32}$(W)×$4^{13}/_{32}$(H)×$1^{3}/_{16}$(D) in
- Weight (approx.) (without battery pack/case and ant.) : 140 g; 4.9 oz

■ Transmitter

- Modulation system : Variable reactance freq. modulation
- Output power (at 7.2 V DC) : High 5.5 W, Mid. 2.5 W, Low 0.5 W.
- Max. frequency deviation : FM (wide) ±5.0 kHz
  FM (narrow) ±2.5 kHz
- Spurious emissions : Less than –60 dBc
- External mic. connector : 3-conductor 2.5 (d) mm ($^{1}/_{10}$″)/2.2 kΩ

■ Receiver

- Receive system : Double-conversion superheterodyne
- Intermediate frequencies : 1st: 21.7 MHz, 2nd: 450 kHz
- Sensitivity (at 12 dB SINAD) : –0.14 µV typ.
- Squelch sensitivity (threshold) : –0.1 µV typ.
- Selectivity : FM (wide) 70 dB typ.
  FM (narrow) 50 dB typ.
- Spurious and image rejection : 75 dB typ.
- Intermodulation : FM (wide) 70 dB typ.
  FM (narrow) 65 dB typ.
- Audio output power (at 10% distortion)
  - Internal speaker : 0.75 W typ. with a 16 Ω load
  - External speaker : 0.45 W typ. with a 8 Ω load
- External speaker connector : 3-conductor 3.5(d) mm; ($^{1}/_{8}$″)/8 Ω

All stated specifications are subject to change without notice or obligation.

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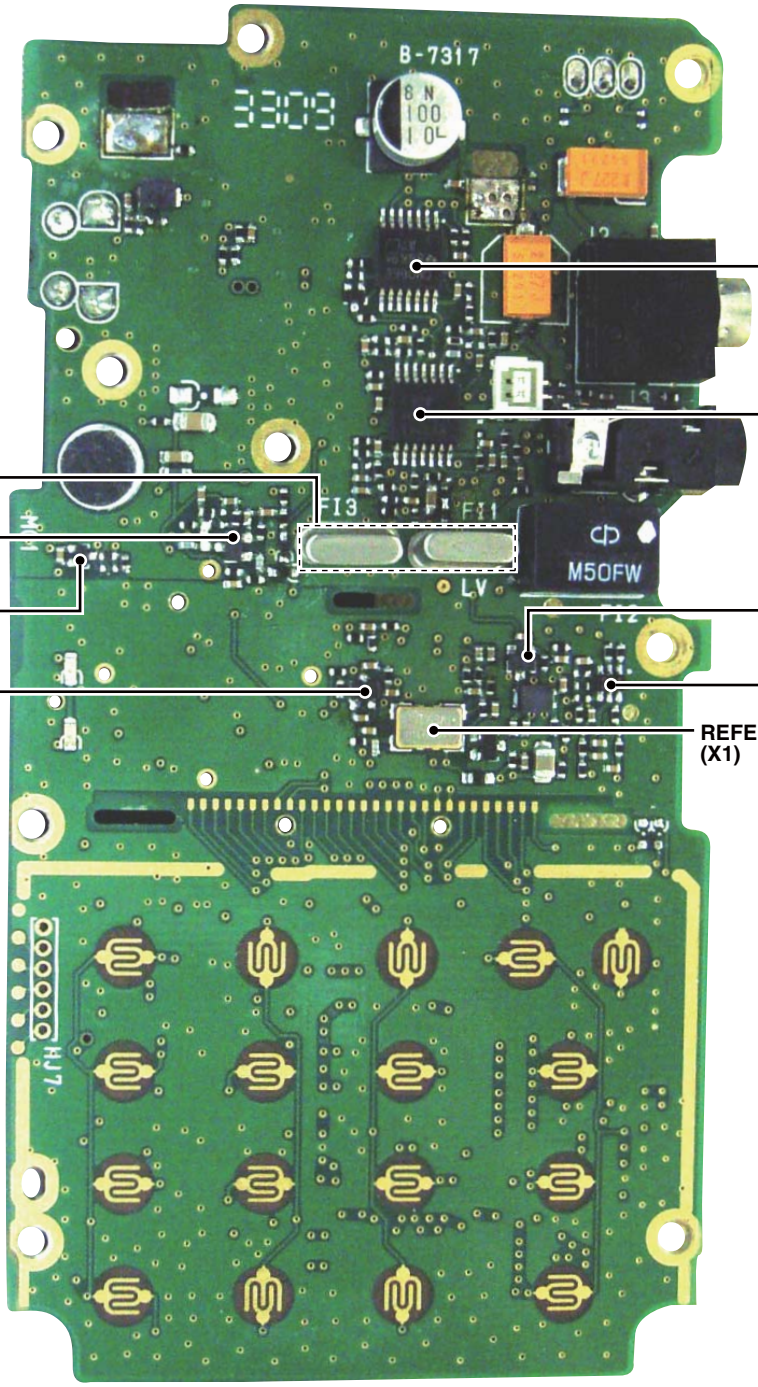
SECTION 2 INSIDE VIEWS

• MAIN UNIT
(TOP VIEW)



2ND IF FILTERS (FI1 and FI3)
TX PRE-DRIVE AMP (Q3)
INTERNAL MIC CONTROLLER (Q82)
BUFFER (Q7)
ANALOG SW (IC4)
APC CTRL/ MIC AMP/ LPF/HPF (IC3)
IF 1ST AMP (Q14)
TONE FILTER (Q53)
REFERENCE FREQ. OSCILLATOR (X1)

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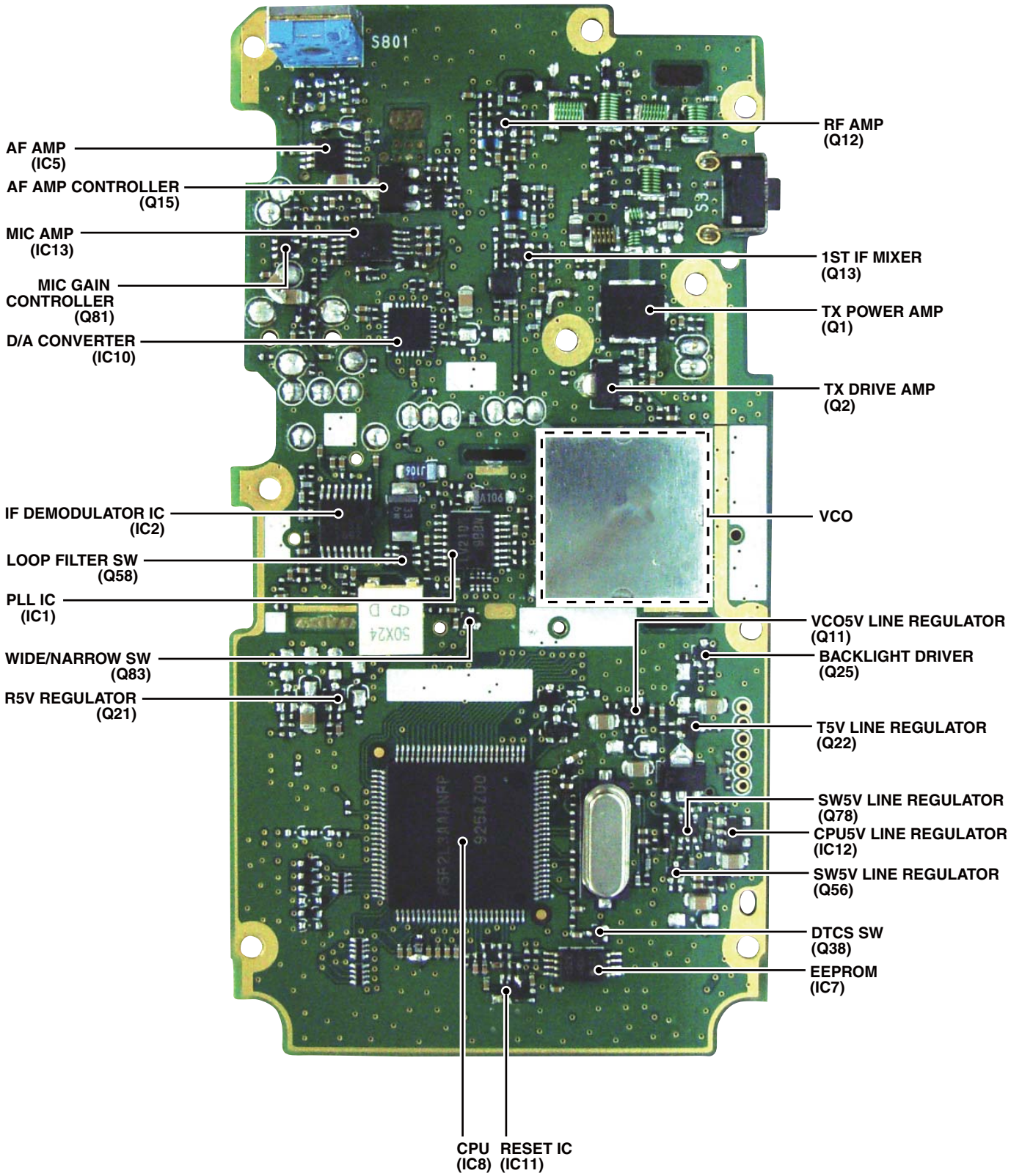
• MAIN UNIT
(BOTTOM VIEW)



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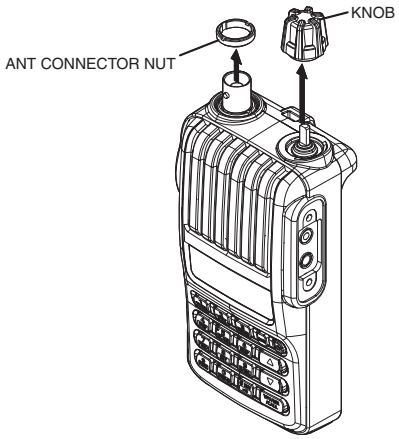
SECTION 3 DISASSEMBLY INSTRUCTION

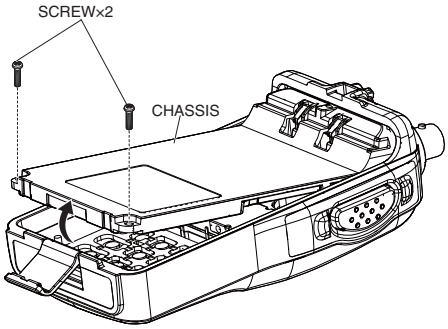
1. REMOVING THE CHASSIS

1) Remove the ANT connector nut and knob.

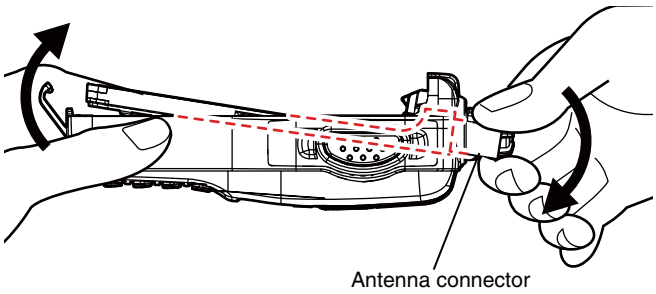


2) Remove 2 screws from the bottom of the CHASSIS.
3) Lift the bottom of the CHASSIS up in the direction of the arrow.

BE CAREFUL to not pull out the **speaker wire** when separating the CHASSIS and the FRONT PANEL.

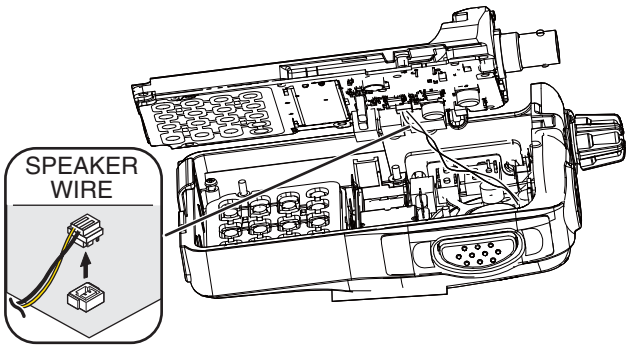


For easy separation of the CHASSIS
Use the antenna connector as the grip to GENTLY lift the bottom of the CHASSIS up slightly.



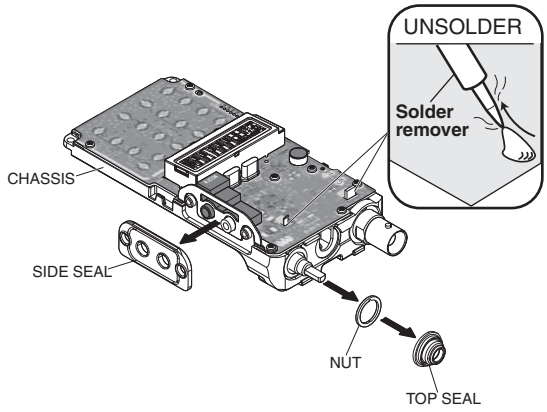
(Continued to the right above)

4) CAREFULLY lift the chassis out of the FRONT PANEL and turn it over in order to unplug the speaker wire.

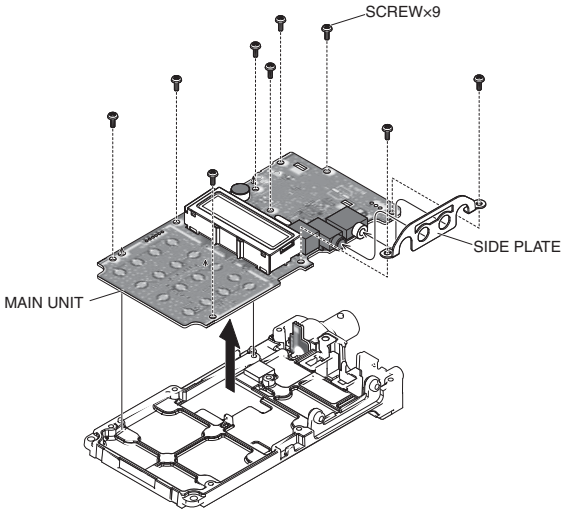


2. REMOVING THE MAIN UNIT

1) Remove the top seal, side seal and nut from the CHASSIS.
2) Unsolder the 2 points shown.



3) Remove the 9 screws and the side plate from the MAIN UNIT.



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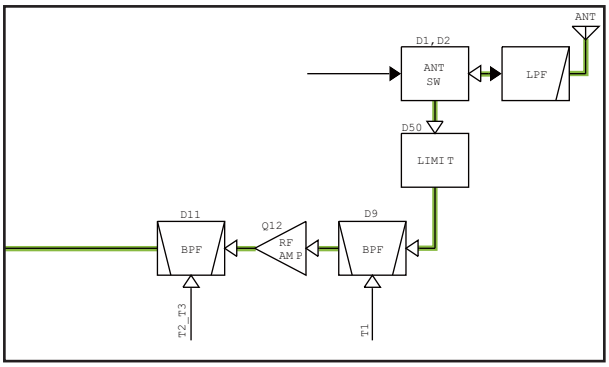
SECTION 4 CIRCUIT DESCRIPTION

4-1 RECEIVER CIRCUITS

RF CIRCUITS

The RX signal from the antenna is passed through the LPF, antenna SW (D1 and D2) and limiter (D50), then filtered by the tuned BPF (D9). The filtered RX signal is then applied to the RF AMP (Q12). The amplified RX signal is filtered by another tuned BPF (D11), then applied to the 1st IF circuits.

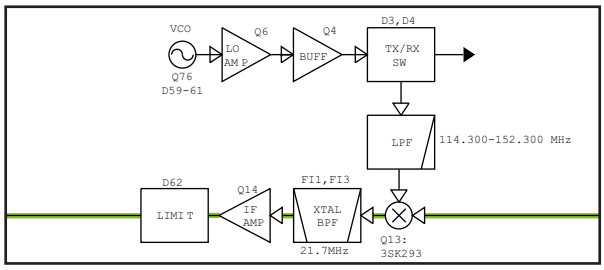
• RF CIRCUITS



1ST IF CIRCUITS

The RX signal from the RF circuits is applied to the 1st IF mixer (Q13), to be mixed with the 1st local oscillator (LO) signal generated by the VCO (Q76, D59–D61), resulting in the 21.7 MHz 1st IF signal. The 1st IF signal is filtered by the 1st IF filter (crystal filter; FI1 and FI3) to remove unwanted signal, and applied to the 1st IF AMP (Q14). The amplified 1st IF signal is applied to the 2nd IF circuit via the limiter (D62).

• 1ST IF CIRCUITS



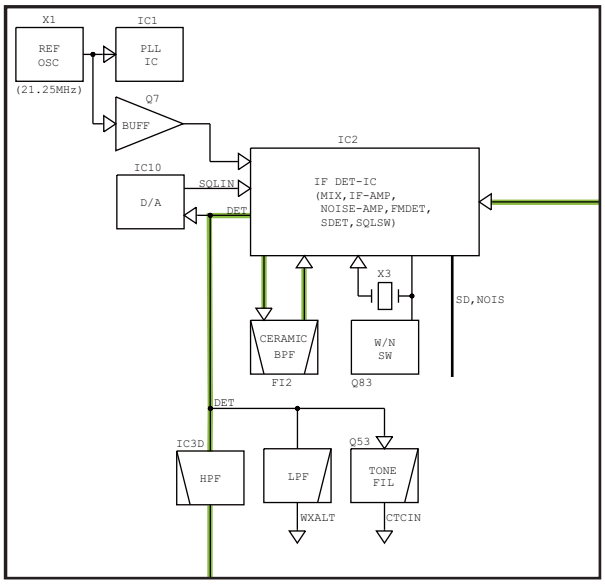
2ND IF CIRCUITS AND DEMODULATOR

IC2 is the IF demodulator IC which contains the 2nd IF mixer, 2nd IF AMP, FM detector, etc. in its package.

The signal from the 1st IF circuits is applied to the 2nd IF mixer, to be mixed with the 2nd LO signal generated by the reference frequency oscillator, resulting in the 450 kHz 2nd IF signal. The 2nd IF signal is filtered by the external 2nd IF filter (ceramic filter; FI2) to remove any unwanted signal, and applied to the 2nd IF AMP. The amplified 2nd IF signal is applied to the frequency demodulator circuit.

The demodulated AF signal is applied to the RX AF circuits.

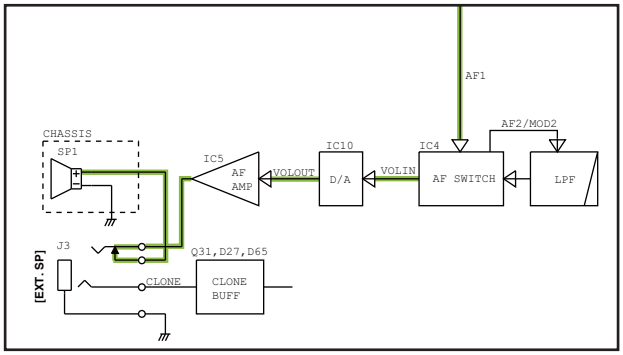
• 2ND IF CIRCUITS



RX AF CIRCUITS

The demodulated AF signal from the IF demodulator IC (IC2) is passed through the HPF (IC3D), which separates the voice and tone signals, AF line SW (IC4), and then adjusted in level by the D/A converter (IC10). The level-adjusted AF signal is applied to the AF power AMP (IC5). The power-amplified AF signal is applied to the internal speaker or to an external speaker.

• RX AF CIRCUITS



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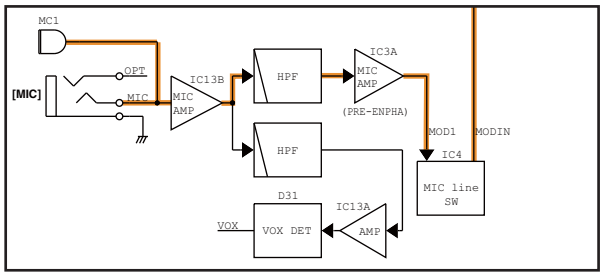
4-2 TRANSMITTER CIRCUITS

TX AF CIRCUITS

The audio signal from the internal or external microphone (MIC signal) is applied to the MIC AMP (IC13B). The amplified MIC signal is passed through the HPF (R266, C132, C304) and the MIC AMP with pre-emphasis circuitry (IC3A). The pre-emphasized MIC signal is passed through the MIC line SW (IC4), and applied to the D/A converter (IC10).

The level-adjusted MIC signal is applied to the modulation circuits as the modulation signal.

• TX AF CIRCUITS

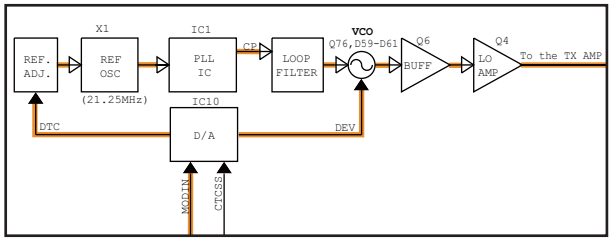


MODULATION CIRCUITS

The modulation signal from the TX AF circuits are applied to the VCO to frequency modulate it.

The frequency modulated VCO output is amplified by the buffer (Q6), amplified by the LO AMP (Q4), then applied to the TX amplifier circuits via the LO SW (D3 and D4) as the TX signal.

• MODULATION CIRCUITS

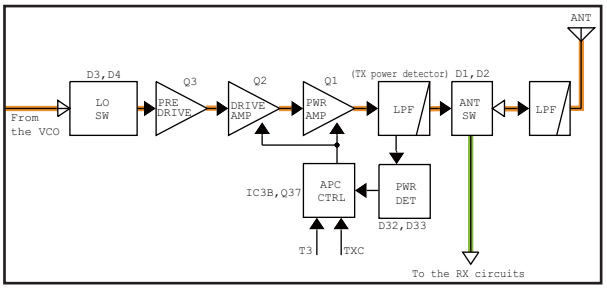


TX AMPLIFIER CIRCUITS

The TX signal from the VCO is amplified by the pre-drive AMP (Q3), drive AMP (Q2) and power AMP (Q1) in sequence, to obtain the TX output power.

The power-amplified TX signal is fed to the antenna through the LPFs and antenna SW (D1 and D2).

• TX AMP CIRCUITS



4-3 FREQUENCY SYNTHESIZER CIRCUITS

The oscillation frequency of the VCO is determined by the variable capacitors (D59 and D60). While transmitting, D58 is ON, and C461 and C462 provide the RF path to GND. This shifts the oscillating frequency range higher. Adding modulation signal to D61 provides frequency modulation.

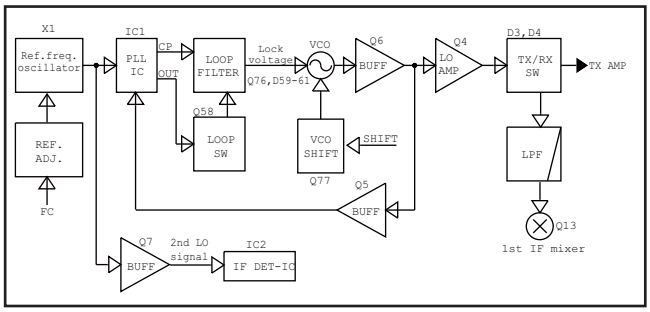
The output signal of the VCO is passed through the buffer AMP (Q6), and applied to the buffer AMP (Q5: for PLL feedback) or the buffer AMP (Q4: LO AMP).

The output signal of the buffer AMP (Q5: for PLL feedback) is applied to the PLL IC (IC1). The applied signal is phase-compared with the reference frequency signal from the TCXO (X1), and the resulting signal is output from the PLL IC via the charge pump, and then applied to the VCO as the lock voltage, after being passed through the loop filter.

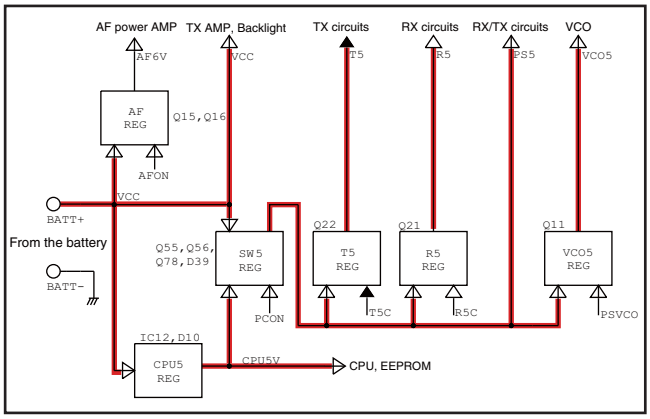
Q58 shifts the characteristic of the loop filter for shorter PLL lockup time when the transceiver needs to lock the PLL up immediately.

The VCO's power supply circuit (Q11), which works as a ripple filter, has the capability of fast ON/OFF switching operation that works even when the transceiver is in the power save mode.

• FREQUENCY SYNTHESIZER CIRCUITS



4-4 VOLTAGE BLOCK DIAGRAM



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4-5 PORT ALLOCATIONS

• CPU (IC8)

Pin No.	LINE NAME	DESCRIPTION	I/O
1	MMUT	MIC mute switching. L=MIC mute.	O
3	TONE	DTMF/1750 Hz tones and beep sounds.	O
4	CTCOUT	CTCSS/DTCS signals.	O
10	RESET	CPU reset signal. H=The CPU is reset.	I
15	CSHIFT	CPU clock shift contol. H=While the oscillation frequency is shifted.	O
17	DUSE	DTCS filter switching. H=while the DTCS is in use.	O
18	UNLK	PLL unlock detect. H=While the PLL circuit is unlocked.	I
19	NOIS	Noise signal.	I
22	POWER	[POWER] key input.	I
23	PTT	External PTT input. H=An external PTT is pushed.	I
24	SHIFT	VCO oscillation frequency shift control. L=While receiving.	O
25	PSVCO	Power supply line for the VCO switching. H=While the VCO is activated.	O
26	PS5C	Power supply line "PS5" switching. L=While the transceiver is in the power save mode.	O
27	R5C	Power supply line "R5" switching. L=While receiving.	O
28	T5C	Power supply line "T5" switching. L=While transmitting.	O
29	TXC	Transmitting control. L=TX mute.	O
30	PCON	Power supply line "SW5V" switching. H=While transceiver's power is ON.	O
62	NWC	Discriminator dumping resister switching. H=While receiving in the wide mode.	O
63	INTPTT	Internal PTT input. L=[PTT] is pushed.	I
64	ITNMIC	Internal microphone control.	O
65	MIC2	Microphone gain control. H=MIC gain "L."	O
66	MIC1	Microphone gain control. H=MIC gain "M."	O
67	LEDC	LCD backlight control. H=Backlight ON.	O
68	DICK	CONTROL DIAL [VOL] inputs.	I
69	DIUD		
71–74	KS0–KS3	Keypad scanning signal outputs.	O
75–77	KR0–KR3	Keypad inputs.	I
80	VOX	Microphone voice input detect.	I
81	VIN	Remaining battery voltage.	I
83	TEMP	The temperature sensing voltage.	I
84	SD	RSSI from the IF demodulator IC (IC2, pin 13).	I
85	CTCIN	CTCSS/DTCS signals.	I
86	WXALT	Weather alert detect.	I
87	DASTB	D/A converter strobe.	O
88	PLLSTB	PLL strobe.	O
89	DATA	Common serial data.	O
90	CK	Common serial clock.	O
94	ESCK	Clock to the EEPROM.	O
95	ESDA	Serial data to/from the EEPROM.	I/O
98	SPMUTE	Speaker output control. H=Speaker mute.	O
99	AFON	AF power AMP control. L=The AF power AMP is deactivated.	O
100	RMUT	RX AF line mute switching. L=AF mute.	O

• D/A CONVERTER (IC10)

Pin No.	LINE NAME	DESCRIPTION	I/O
23	T1	Tuned BPF (D9) tuning voltage.	O
24	T2	Tuned BPF (D11) tuning voltage.	O
7	T3	• While receiving: BPF tuning voltage. • While transmitting: TX power control reference voltage.	O
8	FC	Reference frequency adjust voltage.	O
10	DET	Squelch threshold level adjustment.	I
11	SQL		O
12	DTC	DTCS deviation adjustment.	O
13	MODIN		I
18	MODIN	FM deviation adjustment.	I
19	DEV		O
20	VOLOUT	Audio output power adjustment.	O
21	VOLIN		I

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SECTION 5 ADJUSTMENT PROCEDURE

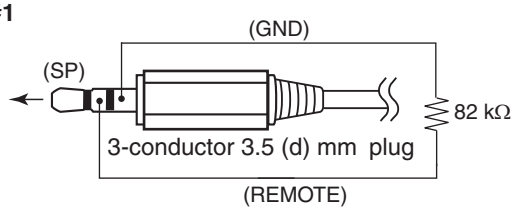
5-1 PREPARATION

EQUIPMENT	GRADE AND RANGE	EQUIPMENT	GRADE AND RANGE
Power supply	Voltage range : 1–12 V DC Current capacity : 3 A	JIG cables	(See the illust shown below)
RF power meter (50 Ω terminated)	Measuring range : 0.1–10 W Frequency range : 100–300 MHz SWR : Less than 1.2 : 1	Frequency counter	Frequency range : 0.1–300 MHz Frequency accuracy : ±0.5 ppm or better Input level : Less than 1 mW
Modulation Analyzer	Frequency range : 0.1–300 MHz Measuring range : 0 to ±10 kHz	Standard signal generator (SSG)	Frequency range : 0.1–300 MHz Output level : –20 dBμ to 90 dBμ (–127 to –17 dBm)
AC millivolt meter	Measuring range :10 mV to 10 V	Attenuator	Power attenuation : 30 dB Capacity : More than 10 W
Voltmeter	Measuring range : 1–12 V	Audio generator (AG)	Frequency range : 300–3000 Hz Output level : 1–500 mV

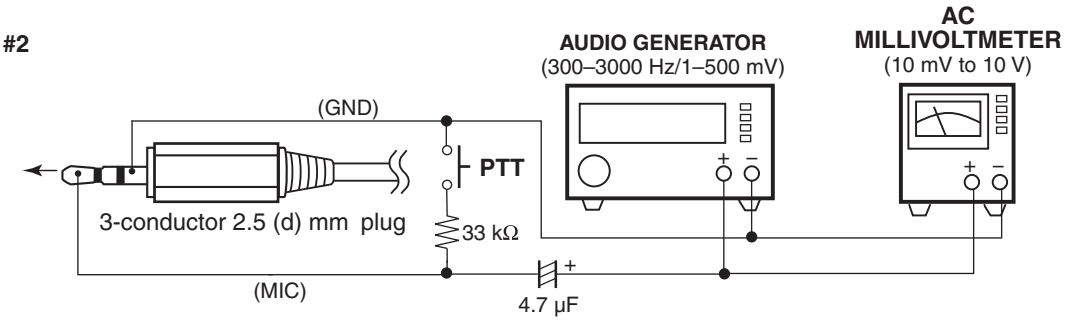
CAUTION!: BACK UP the originally programmed memory data in the transceiver before starting adjustment.
When the adjustment is finished, the memory data may be cleared.

■ JIG CABLE

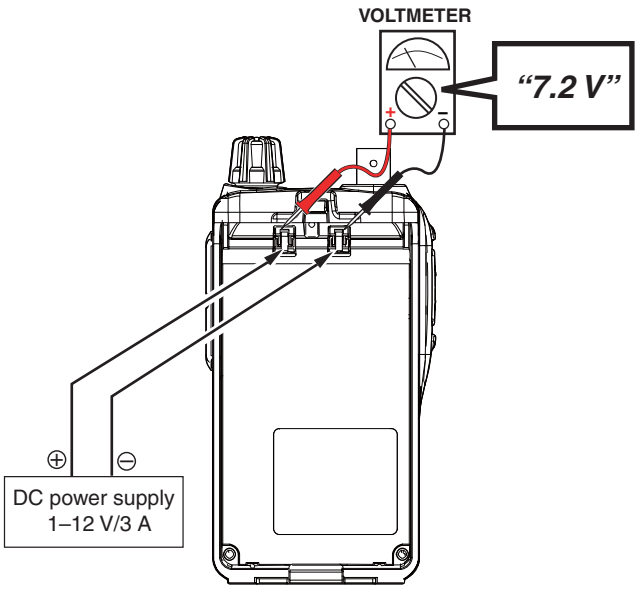
• JIG cable #1



• JIG cable #2



■ POWER SUPPLY



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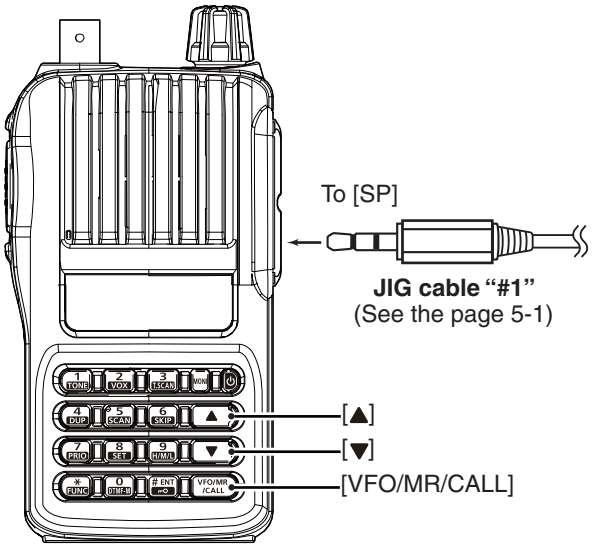
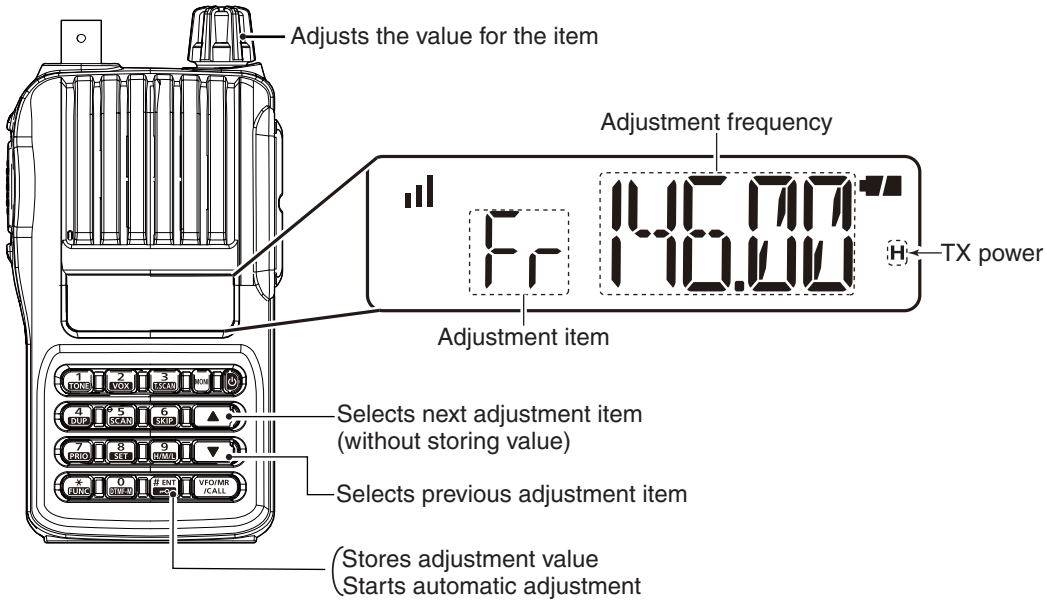
■ ENTERING ADJUSTMENT MODE

1) Turn the power OFF.
2) Connect the JIG cable "#1" (See the page 5-1) to the **[SP]** jack.
3) While pushing [▲], [▼] and **[VFO/MR/CALL]**, turn the power ON.



■ KEY ASSIGNMENTS FOR THE ADJUSTMENT MODE



■ QUITTING ADJUSTMENT MODE

1) Turn the power OFF.
2) Disconnect the JIG cable "#1," then turn the power ON.

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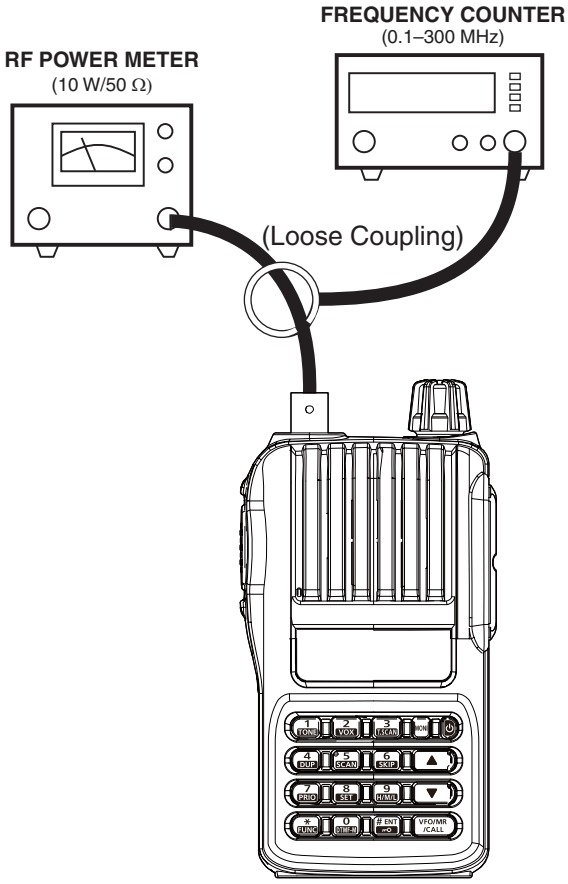
5-2 FREQUENCY ADJUSTMENT

1) Select an adjustment item using [▲]/[▼].
2) Set or modify the adjustment value as specified using **[DIAL]**, then push **[ENT]**.

ADJUSTMENT		TRANSCEIVER'S CONDITION	OPERATION	ADJUSTMENT ITEM	VALUE
REFERENCE FREQUENCY	1	• Frequency : 146.000 MHz • Transmitting	• Loosely couple a frequency counter to the antenna connector.	Fr	146.0000 MHz (±100 Hz)

■ CONNECTION



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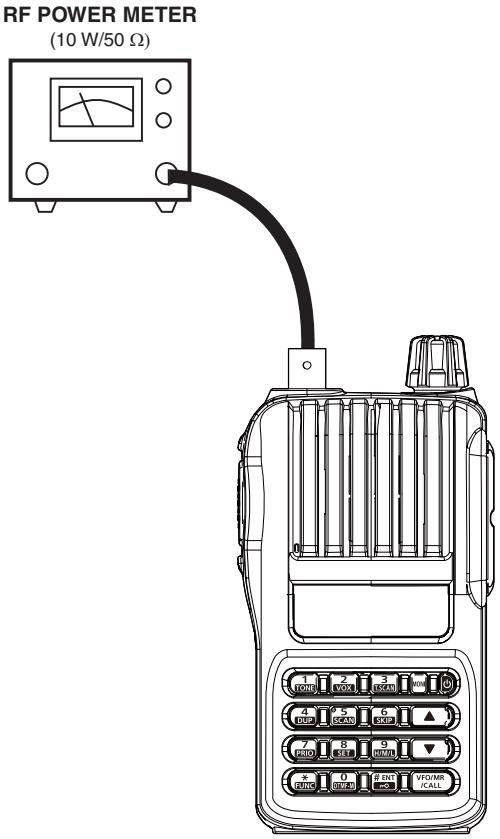
5-3 TRANSMIT ADJUSTMENTS

1) Select an adjustment item using [▲]/[▼].
2) Set or modify the adjustment value as specified using **[DIAL]**, then push **[ENT]**.

ADJUSTMENT		TRANSCEIVER'S CONDITION	OPERATION	ADJUSTMENT ITEM	VALUE
TX OUTPUT POWER (Hi power)	1	• Frequency : 146.000 MHz • Transmitting	• Connect an RF power meter to the antenna connector.	Po H	5.3–5.7 W
(Mid power)	2	• Transmitting		Po M	2.3–2.7 W
(Low power)	3	• Transmitting		Po L	0.4–0.6 W

■ CONNECTION



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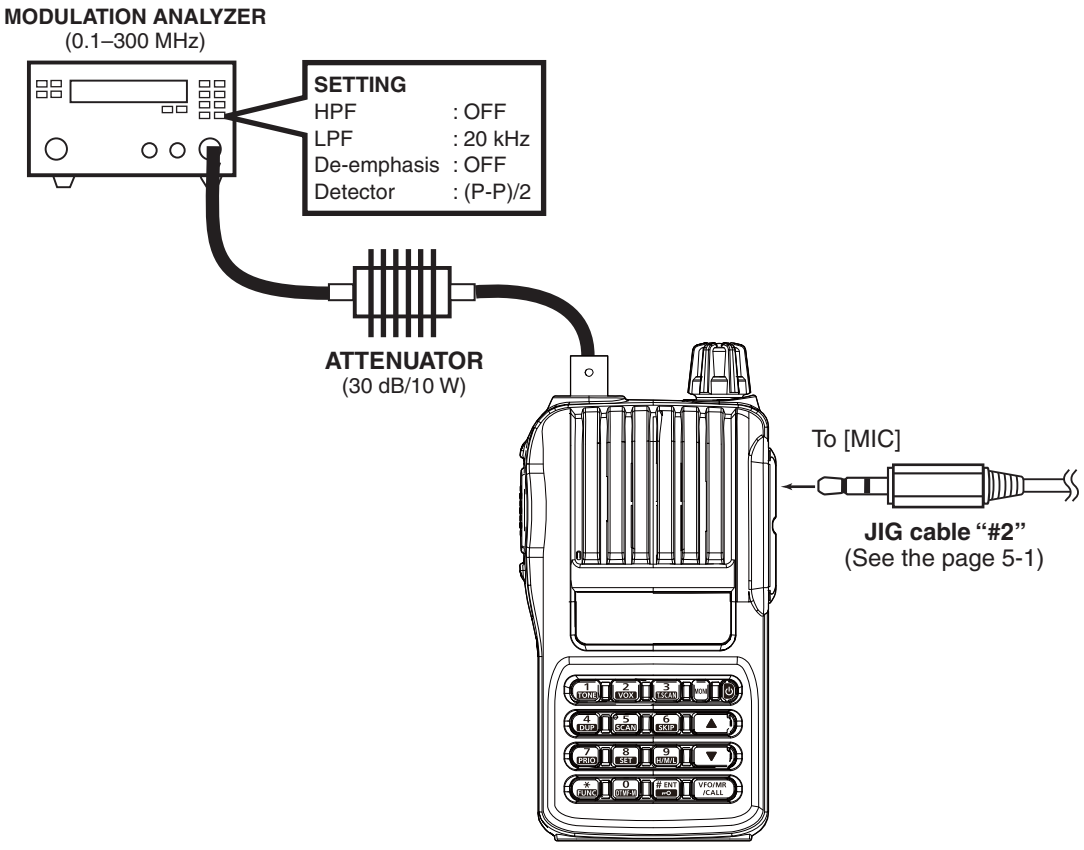
5-3 TRANSMIT ADJUSTMENTS (continued)

1) Select an adjustment item using [▲]/[▼].
2) Set or modify the adjustment value as specified using **[DIAL]**, then push **[ENT]**.

ADJUSTMENT		TRANSCEIVER'S CONDITION	OPERATION	ADJUSTMENT ITEM	VALUE
FM DEVIATION (Band low)	1	• Frequency : 144.000 MHz • Transmitting	1) Connect a modulation analyzer to the antenna connector through an attenuator, and set it as; HPF : OFF LPF : 20 kHz 2) Connect the JIG cable "#2" to the [MIC] jack. 3) Connect an audio generator to the JIG cable (see the page 5-1), and set it as; Frequency : 1 kHz Level : 150 mVrms	dE	±4.1 to ±4.3 kHz
(Band high)	2	• Frequency : 148.000 MHz • Transmitting			
MODULATION BALANCE (Band low)	1	• Frequency : 144.000 MHz • Transmitting	1) Connect a modulation analyzer to the antenna connector through an attenuator, and set it as; HPF : OFF LPF : 20 kHz2) 2) Connect an audio generator to the JIG cable "#2" (see the page 5-1), and set it as; Frequency : 300 Hz Level : 450 mVrms	dt	±4.1 to ±4.3 kHz
(Band high)	2	• Frequency : 148.000 MHz • Transmitting			
TONE DEVIATION (CTCSS)	1	• Frequency : 146.000 MHz • Transmitting	1) Connect a modulation analyzer to the antenna connector through an attenuator, and set it as; HPF : OFF LPF : 20 kHz 2) No audio signals are applied.	dC	±0.7 to ±0.8 kHz
(DTCS)	2	• Frequency : 146.000 MHz • Transmitting		dd	
(DTMF)	3	• Frequency : 146.000 MHz • Transmitting		dF	±3.4 to ±3.6 kHz
(EUROPEAN TONE)	4	• Frequency : 146.000 MHz • Transmitting		dU	

■ CONNECTION



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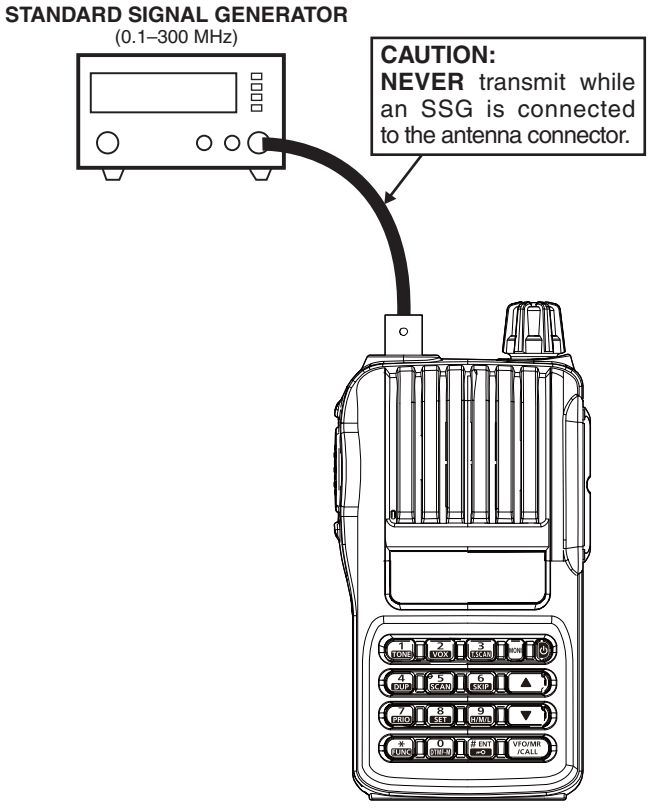
5-4 RECEIVE ADJUSTMENTS

1) Select an adjustment item using [▲]/[▼].
2) Set or modify the adjustment value as specified using **[DIAL]**, then push **[ENT]**.

ADJUSTMENT		TRANSCEIVER'S CONDITION	OPERATION	ADJUSTMENT ITEM	VALUE
RX SENSITIVITY (Band low)	1	**NOTE:** When "RX SENSITIVITY" is re-adjusted, "S-METER" must be re-adjusted too.			
		• Frequency : 136.020 MHz • Receiving	• Connect an SSG to the antenna connector and set it as; Frequency : 136.020 MHz Level† : 0 dBμ (–107 dBm) Modulation : 1 kHz Deviation : ±3.5 kHz	t1	Push **[ENT]** (Automatic adjustment)
(Band center)	2	• Frequency : 155.020 MHz • Receiving	• Set the SSG as; Frequency : 155.020 MHz	t2	
(Band high)	3	• Frequency : 173.980 MHz • Receiving	• Set the SSG as; Frequency : 173.980 MHz	t3	
SQUELCH (Wide mode)	1	• Frequency : 146.020 MHz • Receiving	• Connect a 50 Ω terminator to the antenna connector. **or** • Connect an SSG to the antenna connector and apply no signal.	SQ	Push **[ENT]** (Automatic adjustment)
(Narrow mode)	2	• Receiving		SN	
S-METER	1	**NOTE:** When "RX SENSITIVITY" must be adjusted before "S-METER." And when "RX SENSITIVITY" is re-adjusted, "S-METER" must be re-adjusted too.			
		• Frequency : 146.020 MHz • Receiving	• Connect an SSG to the antenna connector and set it as; Frequency : 146.020 MHz Level† : –9 dBμ (–116 dBm) Deviation : None	SL	Push **[ENT]** (Automatic adjustment)

†; The output level of the standard signal generator (SSG) is indicated as the SSG's terminated (50 Ω) circuit.

■ CONNECTION



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SECTION 6 PARTS LIST

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
IC1	1130008351	S.IC LV2105V-TLM-E	B	51.1/28.4
IC2	1110007320	S.IC NJM2591V-TE1-#ZZZB	B	49.5/40.3
IC3	1110006470	S.IC LMV324IPWR	T	29.6/29.6
IC4	1130011770	S.IC CD4066BPWR	T	18.4/28.3
IC5	1110007610	S.IC TPA0211DGNR	B	14.7/41.9
IC7	1130014960	S.IC R1EX24032ATA00A	B	91.5/17.8
IC8	1140015240	S.IC R5F2L3AAANFP	B	79/29.5
IC10	1110007550	S.IC R2A20178NP	B	31.2/34.2
IC11	1110007620	S.IC NJU7704F3-42A-TE1-#ZZZB	B	94.1/24.3
IC12	1180002251	S.IC S-812C50AMC-C3E-G	B	78.8/3.3
IC13	1110003800	S.IC NJM2904V-TE1-#FMZB	B	23/38
Q1	1560001700	S.FET RD07MUS2B-T112	B	29.5/13.1
Q2	1560001241	S.FET RD01MUS1-T113	B	36.4/15.6
Q3	1530003421	S.TRA 2SC5110-O(TE85R,F)	T	39.4/15.9
Q4	1530002920	S.TRA 2SC4226-T1 R25	B	46.3/18.6
Q5	1530002920	S.TRA 2SC4226-T1 R25	B	50/18.6
Q6	1530002920	S.TRA 2SC4226-T1 R25	B	43.5/15
Q7	1530002920	S.TRA 2SC4226-T1 R25	T	49.6/25.5
Q11	1590001650	S.TRA XP4601(TX)	B	67.3/13
Q12	1580000731	S.FET 3SK293(TE85L,F)	B	11.6/25
Q13	1580000731	S.FET 3SK293(TE85L,F)	B	24.2/23.5
Q14	1530002601	S.TRA 2SC4215-O(TE85R,F)	T	47.4/37
Q15	1520000460	S.TRA 2SB1132 T100 R	B	17.9/35.8
Q16	1590003800	S.TRA KTC811U-GR-RTK/P	B	18.7/31.5
Q17	1510001100	S.TRA 2SA1832-GR(TE85R,F)	B	30.1/45.1
Q21	1510001151	S.TRA L2SA1576AST1G <SLVJ>	B	65.9/41.4
Q22	1510001151	S.TRA L2SA1576AST1G <SLVJ>	B	68.9/7.5
Q25	1530002691	S.TRA 2SC4116-GR(TE85R,F)	B	61.8/6.3
Q31	1590004080	S.TRA LDTC144TWT1G <SLVJ>	B	69/20.3
Q37	1590004050	S.TRA LDTA144EET1G <SLVJ>	T	21.2/24.4
Q38	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	88.6/16.3
Q53	1590001650	S.TRA XP4601(TX)	T	48.8/43.7
Q55	1520000840	S.TRA KTA1664Y-RTF/P	B	73.4/8.4
Q56	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	82.7/8.8
Q58	1590001650	S.TRA XP4601(TX)	B	52.5/34.6
Q76	1530002920	S.TRA 2SC4226-T1 R25	B	45.3/11.5
Q77	1590004060	S.TRA LDTC114EET1G <SLVJ>	B	72.8/19.2
Q78	1590003800	S.TRA KTC811U-GR-RTK/P	B	78.5/7.7
Q81	1590001410	S.TRA XP1215(TX)	B	23.5/46.1
Q82	1590004070	S.TRA LDTC144EET1G <SLVJ>	T	40.2/5
Q83	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	58.4/28.4
D1	1750001910	S.DIO HVD144AKRF-E	B	14/13.4
D2	1750001910	S.DIO HVD144AKRF-E	B	7.2/15.5
D3	1750001910	S.DIO HVD144AKRF-E	T	41.1/19.7
D4	1750001910	S.DIO HVD144AKRF-E	T	39.3/19.5
D9	1720000781	S.VAR HVU350BTRF-E	B	8/23.2
D10	1750001810	S.DIO L1SS400T1G <SLVJ>	B	80.1/5.8
D11	1750001780	S.VAR HVB350BYPTL-E	B	18.5/24.2
D13	1750001910	S.DIO HVD144AKRF-E	B	79.7/9.8
D27	1750001820	S.DIO LRB706F-40T1G <SLVJ>	B	66/20.9
D31	1750001810	S.DIO L1SS400T1G <SLVJ>	B	25/34.5
D32	1750001820	S.DIO LRB706F-40T1G <SLVJ>	B	14.9/15.7
D33	1750001820	S.DIO LRB706F-40T1G <SLVJ>	B	18.4/15.7
D34	1790001810	S.VAR AVR-M1005C080MTABB	T	40.6/8.1
D39	1750001810	S.DIO L1SS400T1G <SLVJ>	B	83.5/4.5
D41	1750001810	S.DIO L1SS400T1G <SLVJ>	B	81.9/43.9
D42	1750001810	S.DIO L1SS400T1G <SLVJ>	B	83.1/43.9
D43	1750001810	S.DIO L1SS400T1G <SLVJ>	B	84.3/43.9
D44	1750001810	S.DIO L1SS400T1G <SLVJ>	B	86.7/43.9
D46	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR]	T	59.8/46.4
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-21]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-01]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA-11]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [AUS-21]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-22]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-02]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA-12]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR-02]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [AUS-22]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-23]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-03]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA-13]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [AUS-23]		
D47	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR]	T	59.8/47.6
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-21]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-01]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-22]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-02]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR-02]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-23]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-03]		
D48	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR]	B	85.5/43.9
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-21]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-01]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA-11]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-22]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-02]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA-12]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-23]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-03]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA-13]		

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
D49	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR]	B	87.9/43.9
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-21]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-01]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [AUS-21]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-22]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-02]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [AUS-22]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EUR-23]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [UK-03]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [AUS-23]		
D50	1750001810	S.DIO L1SS400T1G <SLVJ>	B	7.2/20.5
D58	1750001790	S.DIO 1SS390 TE61	B	53.4/10.3
D59	1750000721	S.VAR HVC375BTRF-E	B	50.1/12.1
D60	1750000721	S.VAR HVC375BTRF-E	B	51.6/10.3
D61	1750001190	S.VAR KDV214E RTK/P	B	48.1/14.5
D62	1750001820	S.DIO LRB706F-40T1G <SLVJ>	T	53.5/34.7
D65	1790001241	S.DIO MA2S7280GL		
FI1	2030000270	MON MCF21R15AB 21.7 MHz (FL-363)		
FI2	2020002410	CER LTM450FW <JJE>		
FI3	2030000270	MON MCF21R15AB 21.7 MHz (FL-363)		
X1	6050013080	S.XTA CR-901 TTS14VSB-A4 21.250 MHz	T	52.2/30.3
X2	6050013060	S.XTA CR-899 (HC-49US/9.8304 MHz) <JJE>	B	79.5/15.6
X3	6070000300	S.DIS JTBM450CX24 <JJE>	B	58.3/35.9
L1	6200012460	S.COI 0.30-1.7-8TL 54N <COMO>	B	11.7/7
L2	6200012470	S.COI 0.30-1.7-7TL 45.3N <COMO>	B	11.1/11.1
L4	6200012470	S.COI 0.30-1.7-7TL 45.3N <COMO>	B	17.3/11.2
L5	6200012980	S.COI 0.40-1.4-5TR 18.3N <COMO>	B	22.6/15.9
L6	6200013790	S.COI MLK1005S47NJT	B	34.2/11.2
L7	6200013800	S.COI MLK1005S39NJT	T	38.9/13.9
L8	6200013750	S.COI MLK1005SR10JT	B	44.9/19.9
L14	6200013760	S.COI MLK1005S82NJT	B	53.8/18.7
L15	6200012460	S.COI 0.30-1.7-8TL 54N <COMO>	B	10.6/15.3
L16	6200012460	S.COI 0.30-1.7-8TL 54N <COMO>	B	10.9/19.1
L18	6200011650	S.COI LQW18AN68NG00D	B	13.6/26.6
L19	6200010910	S.COI LQW18AN56NG00D	B	20.4/24.3
L20	6200003281	S.COI NLV25T-2R2J	B	26.9/25.2
L21	6200013800	S.COI MLK1005S39NJT	B	29.8/22
L24	6200003711	S.COI NLV25T-2R7J	T	14.3/10.1
L29	6200013750	S.COI MLK1005SR10JT	B	27.9/20.3
L32	6200012970	S.COI 0.30-0.91-4TR 8.6N <COMO>	B	22.9/12.9
L33	6200012390	S.COI 0.30-0.92-3TR 5.8N <COMO>	B	20.4/12.9
L35	6200003281	S.COI NLV25T-2R2J	T	50/38.1
L44	6200011770	S.COI LQW18ANR10G00D	B	49.4/10.9
L45	6200011590	S.COI LQW18AN39NG00D	B	48.7/9
L46	6200001981	S.COI NLV25T-1R0J	B	51.8/14.2
R1	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	10.9/11.9
R4	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	37.3/16.1
R5	7030007250	S.RES ERJ2GEJ 220 X (22)	B	31.6/9.3
R6	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	80.5/12.1
R7	7030005590	S.RES ERJ2GEJ 680 X (68)	B	37.9/11.9
R8	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	80/10.9
R9	7410001130	S.ARR EXB28V102JX	B	92.5/39.2
R10	7030004980	S.RES ERJ2GEJ 101 X (100)	T	38.3/17.9
R11	7030004980	S.RES ERJ2GEJ 101 X (100)	B	77.6/9.8
R12	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	36.9/14
R13	7030005530	S.RES ERJ2GEJ 100 X (10)	T	37.8/12.6
R14	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	41.7/17.5
R15	7030004980	S.RES ERJ2GEJ 101 X (100)	T	41.1/15.9
R16	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	74.1/3.9
R17	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	49.5/23.8
R18	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	46.3/20.3
R19	7030007280	S.RES ERJ2GEJ 331 X (330)	B	44.7/16.8
R20	7030005080	S.RES ERJ2GEJ 823 X (82K)	B	48.7/16.8
R21	7030007280	S.RES ERJ2GEJ 331 X (330)	B	51.4/19.9
R22	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	43.7/13.3
R23	7030005010	S.RES ERJ2GEJ 681 X (680)	B	43.8/17.7
R24	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	48.5/27.3
R26	7030004980	S.RES ERJ2GEJ 101 X (100)	T	48.2/23.6
R29	7030012260	S.RES ERJ2RKD 4703X (470K)	B	76.6/6.1
R30	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	69.1/13.2
R31	7030010010	S.RES ERJ2RKF 334 X (330K)	B	76.6/4.5
R33	7030009280	S.RES ERJ2GEJ 391 X	B	47.3/29.6
R35	7030004980	S.RES ERJ2GEJ 101 X (100)	B	47.6/30.8
R41	7030004980	S.RES ERJ2GEJ 101 X (100)	B	49.4/23.1
R44	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	35.3/31.2
R48	7030008290	S.RES ERJ2GEJ 183 X (18K)	T	48.4/33.9
R49	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	49.2/34.8
R50	7030005170	S.RES ERJ2GEJ 474 X (470K)	T	48.4/33
R51	7030004980	S.RES ERJ2GEJ 101 X (100)	T	25.1/26.4
R52	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	25.1/28.1
R53	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	23.3/28.4
R54	7030008300	S.RES ERJ2GEJ 184 X (180K)	T	24.6/29.3
R57	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	9/27.1
R59	7030008280	S.RES ERJ2GEJ 271 X (270)	B	13.8/24.4
R61	7030005530	S.RES ERJ2GEJ 100 X (10)	B	11.2/28.3
R64	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	18.8/22
R66	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	19.7/22
R68	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	37.3/19.5

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

fineline6

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R69	7030004980	S.RES ERJ2GEJ 101 X (100)	T	35.7/19.5
R70	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	23.4/21.3
R71	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	25.2/25.6
R72	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	22.1/23.4
R73	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	23.4/25.6
R74	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	24.3/25.6
R75	7030004990	S.RES ERJ2GEJ 221 X (220)	B	26.1/21.3
R77	7030004980	S.RES ERJ2GEJ 101 X (100)	B	29/26
R79	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	41.7/34.6
R80	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	47.4/38.8
R81	7030004980	S.RES ERJ2GEJ 101 X (100)	T	52/39.6
R82	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	55.8/39.6
R83	7030005000	S.RES ERJ2GEJ 471 X (470)	B	54.3/43
R84	7030009280	S.RES ERJ2GEJ 391 X	T	55.2/40.2
R85	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	45/40.2
R86	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	47/43.6
R87	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	44.6/44.5
R88	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	44.6/43.6
R90	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	55.6/40.5
R91	7030005000	S.RES ERJ2GEJ 471 X (470)	T	46.2/40
R93	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	31.2/35.6
R94	7030005160	S.RES ERJ2GEJ 105 X (1M)	T	34/30.4
R95	7030007310	S.RES ERJ2GEJ 155 X (1.5M)	T	32.8/33.8
R97	7030010040	S.RES ERJ2GEJ-JPW	T	34.9/27
R98	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	35.8/27.2
R101	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	83.3/11.6
R102	7030005530	S.RES ERJ2GEJ 100 X (10)	B	75.7/18.7
R104	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	28.9/30.3
R105	7030005000	S.RES ERJ2GEJ 471 X (470)	T	23.3/31.7
R107	7030005100	S.RES ERJ2GEJ 154 X (150K)	T	36.7/27.2
R108	7030005230	S.RES ERJ2GEJ 334 X (330K)	T	24.2/31.7
R112	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	28.2/31.5
R114	7030008290	S.RES ERJ2GEJ 183 X (18K)	T	31.6/25.1
R115	7030005310	S.RES ERJ2GEJ 124 X (120K)	T	32.5/25.1
R117	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	33.6/26.3
R120	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	15.1/30.3
R121	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	18.2/29.7
R122	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	16.9/32
R123	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	16.9/30.4
R126	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	18.7/40.4
R127	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	14.3/46
R129	7030010040	S.RES ERJ2GEJ-JPW	B	10.3/45.2
R130	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	31.9/45
R131	7030005000	S.RES ERJ2GEJ 471 X (470)	B	27.6/43.4
R132	7030005000	S.RES ERJ2GEJ 471 X (470)	B	26/43.4
R133	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	30/43.4
R134	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	31.4/43.8
R135	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	30.1/30.5
R136	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	32/31
R137	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	27/33.1
R138	7030008310	S.RES ERJ2GEJ 564 X (560K)	B	27/34
R139	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	69/41.9
R141	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	68.9/10.2
R142	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	79/40.6
R144	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	40.2/6.9
R148	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	91.5/24.3
R150	7030005000	S.RES ERJ2GEJ 471 X (470)	B	29.7/37.5
R155	7030005570	S.RES ERJ2GEJ 820 X (82)	B	64/5.6
R159	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	34.4/29
R161	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	16.8/15.9
R162	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	18.4/14.8
R163	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	T	18.4/15.7
R164	7030008280	S.RES ERJ2GEJ 271 X (270)	T	16.3/7.9
R169	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	36.9/31.2
R174	7030012300	S.RES ERJ2RKF 1502X (15K)	B	69.2/22.3
R176	7030008410	S.RES ERJ2GEJ 392 X (3.9K)	T	32.1/36.5
R177	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	34.9/36.9
R181	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	54.5/36.5
R182	7510001661	S.THR NTCG16 4LH 473JT	T	55.8/34
R184	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	46/29.8
R187	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	15.9/24.6
R193	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	91.1/28.9
R194	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	90.6/27.6
R195	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	89.7/26.8
R196	7030006610	S.RES ERJ2GEJ 394 X (390K)	B	90.6/25.2
R204	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	64/6.6
R205	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	62.2/8.3
R206	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	20.6/41.5
R207	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	20.1/39.6
R208	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	22.8/42.5
R209	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	20.6/44.7
R210	7030008410	S.RES ERJ2GEJ 392 X (3.9K)	T	22.7/25.3
R211	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	25.6/41.3
R212	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	22/33.4
R213	7030007320	S.RES ERJ2GEJ 225 X (2.2M)	B	23.6/31.6
R214	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	22/31.6
R215	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	23.6/33.4
R216	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	25.9/37.5
R217	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	26.4/38.7
R218	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	21.5/43.8
R219	7030008370	S.RES ERJ2GEJ 561 X (560)	B	22.7/44.3
R221	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	21.5/45.5
R222	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	10.8/27.1
R224	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	87.4/18.7
R225	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	90.7/23.1
R227	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	84.9/18.7
R228	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	90.7/22.2
R235	7030007320	S.RES ERJ2GEJ 225 X (2.2M)	B	89.7/25.2
R238	7410001130	S.ARR EXB28V102JX	B	83.7/40.8
R244	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	52.5/40.5
R245	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	18.7/24.5
R246	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	13.1/30.7
R251	7030005230	S.RES ERJ2GEJ 334 X (330K)	T	26.8/26
R252	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	10.8/23
R255	7030004980	S.RES ERJ2GEJ 101 X (100)	B	35.1/12.2

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R257	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	22.1/32.8
R258	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	9.9/27.1
R259	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	11.7/23
R260	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	68.9/9.3
R261	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	67.8/41.5
R262	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	35.8/23.7
R266	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	24/34.5
R306	7030007280	S.RES ERJ2GEJ 331 X (330)	B	50.3/16.8
R307	7030009280	S.RES ERJ2GEJ 391 X	B	45.4/14.6
R308	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	42.5/19.1
R318	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	53.5/41.7
R319	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	52.3/42.4
R320	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	49/41.6
R321	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	49.9/41.6
R323	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	51.1/44.1
R324	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	T	46.6/44.4
R325	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	46.6/43.5
R326	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	55.1/41.7
R327	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	53.5/44.4
R330	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	83.7/5.5
R331	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	76.6/7.7
R332	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	80.7/8.5
R333	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	54.8/44.4
R334	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.3/46.5
R336	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	51.1/41.4
R337	7030012220	S.RES ERJ2GEJ 185 X (1.8M)	B	66.8/15
R338	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	57.4/46.5
R340	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	30.5/10.5
R341	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	30.7/6.6
R346	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	77.3/18.7
R351	7030005570	S.RES ERJ2GEJ 820 X (82)	B	46.7/32
R352	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	52.7/32.6
R353	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	53.3/25.2
R355	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	50.8/34.3
R357	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	39.2/10.5
R358	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	38.7/9.3
R360	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	B	52.8/36.4
R361	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	54.3/32.6
R433	7030004970	S.RES ERJ2GEJ 470 X (47)	B	47.5/12.5
R434	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	47.3/11.3
R435	7030009270	S.RES ERJ2GEJ 821 X (820)	B	44.7/8.5
R436	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	46.5/9.2
R437	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	50.5/8.6
R438	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	52.9/8.9
R439	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	53.8/8.9
R440	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	49.6/13.2
R441	7030007320	S.RES ERJ2GEJ 225 X (2.2M)	B	49.2/14.4
R442	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	45.8/24.9
R443	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	46.1/26.1
R444	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	44.9/27.4
R445	7410001130	S.ARR EXB28V102JX	B	55/27.5
R448	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	81/18.7
R449	7410001130	S.ARR EXB28V102JX	B	90/39.2
R450	7030010040	S.RES ERJ2GEJ-JPW	T	27.8/47.8
R451	7030010040	S.RES ERJ2GEJ-JPW	T	27.7/41.4
R452	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	16.6/32.5
R453	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	16.6/31.6
R455	7030009280	S.RES ERJ2GEJ 391 X	B	53.8/16.7
R456	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	57.7/31.9
R457	7030010040	S.RES ERJ2GEJ-JPW		
C1	4030009830	S.CER C1005 CH 1H 180J-T	B	9.3/5.5
C2	4030011670	S.CER C1005 CH 1H 2R5B-T	B	11.4/8.9
C4	4030009840	S.CER C1005 CH 1H 060C-T	B	13/11.1
C6	4030013910	S.CER C1005 JB 1H 472K-T	B	90.3/32.5
C7	4030013910	S.CER C1005 JB 1H 472K-T	B	90.3/31.6
C8	4030019740	S.CER C1005 JB 1H 102K-T	B	11.5/13.4
C9	4030013910	S.CER C1005 JB 1H 472K-T	B	90.3/30.7
C10	4030019740	S.CER C1005 JB 1H 102K-T	T	16.8/16.8
C11	4030013910	S.CER C1005 JB 1H 472K-T	B	90.3/29.8
C12	4030019930	S.CER C1005 JB 1A 104K-T	B	93.5/26.5
C13	4030019740	S.CER C1005 JB 1H 102K-T	B	30.5/8.4
C14	4030019740	S.CER C1005 JB 1H 102K-T	B	36.1/11.2
C15	4030010250	S.CER C1005 CH 1H 101J-T	B	33.5/12.2
C16	4030019930	S.CER C1005 JB 1A 104K-T	B	79.6/12.1
C17	4030019740	S.CER C1005 JB 1H 102K-T	B	39.6/9.3
C18	4030019740	S.CER C1005 JB 1H 102K-T	T	24.7/25.2
C19	4030017490	S.CER C1608 JB 1A 105K-T	T	33/11.6
C20	4030019740	S.CER C1005 JB 1H 102K-T	B	19.4/18.4
C22	4030010250	S.CER C1005 CH 1H 101J-T	T	39.3/12.6
C23	4030019740	S.CER C1005 JB 1H 102K-T	T	37.3/17
C24	4030019740	S.CER C1005 JB 1H 102K-T	T	35.7/13.5
C25	4030009780	S.CER C1005 CH 1H 270J-T	T	40.5/17.8
C26	4030019740	S.CER C1005 JB 1H 102K-T	T	42/15.9
C27	4030009830	S.CER C1005 CH 1H 180J-T	B	43.7/20.3
C28	4030009750	S.CER C1005 CH 1H 120J-T	B	45.8/15.8
C29	4030019740	S.CER C1005 JB 1H 102K-T	B	46.3/16.8
C30	4030009770	S.CER C1005 CH 1H 220J-T	B	52.2/18.7
C31	4030019650	S.CER C1005 CH 1H 050B-T	B	47.5/16.6
C32	4030019740	S.CER C1005 JB 1H 102K-T	B	49.5/20.3
C33	4030019740	S.CER C1005 JB 1H 102K-T	B	43.1/16.8
C36	4030019930	S.CER C1005 JB 1A 104K-T	B	78.9/18.7
C37	4030019930	S.CER C1005 JB 1A 104K-T	B	72.9/4.3
C38	4030019740	S.CER C1005 JB 1H 102K-T	B	78.7/12.1
C40	4030019740	S.CER C1005 JB 1H 102K-T	T	36.1/15.6
C41	4030009740	S.CER C1005 CH 1H 100C-T	B	33.5/13.4
C46	4030019810	S.CER C1005 JB 1E 103K-T	B	36.7/12.2
C48	4550006250	S.TAN TEESVA 1A 106M8R	B	47/26.6
C50	4030019490	S.CER C2012 JB 1A 106K-T	B	68.2/15.9
C52	4030009770	S.CER C1005 CH 1H 220J-T	B	7.9/13.8
C54	4030019740	S.CER C1005 JB 1H 102K-T	B	51.1/32.6
C55	4030019810	S.CER C1005 JB 1E 103K-T	B	50.1/24.2
C60	4030019740	S.CER C1005 JB 1H 102K-T	B	48.2/23.6
C61	4030009750	S.CER C1005 CH 1H 120J-T	B	54.1/19.9

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

fineline6

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C62	4030009730	S.CER C1005 CH 1H 090C-T	B	53.2/19.9
C64	4030009740	S.CER C1005 CH 1H 100C-T	T	53.6/26.4
C70	4030019740	S.CER C1005 JB 1H 102K-T	T	49.6/33.6
C71	4030019970	S.CER C1005 JB 0J 105K-T	T	46.8/34.8
C72	4030019970	S.CER C1005 JB 0J 105K-T	T	46.8/33.9
C73	4030019930	S.CER C1005 JB 1A 104K-T	T	24.2/28.1
C75	4030019930	S.CER C1005 JB 1A 104K-T	T	27.7/26
C76	4030009760	S.CER C1005 CH 1H 150J-T	B	13.1/16.7
C79	4030011700	S.CER C1005 CH 1H 040B-T	B	8.9/20
C80	4030011640	S.CER C1005 CH 1H 010B-T	B	13/20.9
C81	4030010250	S.CER C1005 CH 1H 101J-T	B	9.4/24.4
C82	4030019740	S.CER C1005 JB 1H 102K-T	B	9/28.7
C87	4030019810	S.CER C1005 JB 1E 103K-T	B	13.5/23
C88	4030019740	S.CER C1005 JB 1H 102K-T	B	14.7/23.4
C89	4030019740	S.CER C1005 JB 1H 102K-T	B	15/25.8
C90	4030019740	S.CER C1005 JB 1H 102K-T	B	15/24.6
C91	4030011660	S.CER C1005 CH 1H 020B-T	B	16.8/24.6
C92	4030010250	S.CER C1005 CH 1H 101J-T	B	17.9/22
C93	4030019740	S.CER C1005 JB 1H 102K-T	B	18.3/20.8
C94	4030011630	S.CER C1005 CH 1H 0R5B-T	B	18.5/26.2
C95	4030019740	S.CER C1005 JB 1H 102K-T	B	20.9/21.5
C96	4030010250	S.CER C1005 CH 1H 101J-T	B	20.9/22.4
C97	4030019650	S.CER C1005 CH 1H 050B-T	B	21.5/24.6
C98	4030019650	S.CER C1005 CH 1H 050B-T	B	22.4/24.6
C99	4030019740	S.CER C1005 JB 1H 102K-T	T	36.8/18.3
C100	4030011610	S.CER C1005 CH 1H 680J-T	B	31/22.5
C101	4030010090	S.CER C1005 CH 1H 560J-T	B	28.6/22.2
C102	4030009760	S.CER C1005 CH 1H 150J-T	B	29.2/21
C103	4030019740	S.CER C1005 JB 1H 102K-T	B	29.9/24.2
C104	4030019740	S.CER C1005 JB 1H 102K-T	B	24.3/21.3
C106	4030009770	S.CER C1005 CH 1H 220J-T	B	28.7/24.6
C107	4030019740	S.CER C1005 JB 1H 102K-T	B	29.9/25.1
C109	4030019930	S.CER C1005 JB 1A 104K-T	T	45.5/37.2
C110	4030019650	S.CER C1005 CH 1H 050B-T	B	39.7/28.3
C111	4030019810	S.CER C1005 JB 1E 103K-T	T	47.1/40
C112	4030019740	S.CER C1005 JB 1H 102K-T	B	53.9/44.4
C113	4030019740	S.CER C1005 JB 1H 102K-T	B	53/44.4
C114	4030019880	S.CER C1005 JB 1A 333K-T	B	52.1/44.4
C115	4030019740	S.CER C1005 JB 1H 102K-T	B	27.3/21.7
C116	4030011300	S.CER C1005 CH 1H 121J-T	B	54.4/40.8
C117	4030019740	S.CER C1005 JB 1H 102K-T	B	54.2/39.6
C118	4030019810	S.CER C1005 JB 1E 103K-T	B	43.8/40.7
C119	4030019970	S.CER C1005 JB 0J 105K-T	B	43.8/41.6
C120	4030019930	S.CER C1005 JB 1A 104K-T	B	48.6/43.6
C121	4030019690	S.CER C1005 CH 1H 221J-T	B	47/44.5
C122	4030019690	S.CER C1005 CH 1H 221J-T	B	45.8/44.1
C123	4030019740	S.CER C1005 JB 1H 102K-T	B	35.3/33.9
C124	4030019810	S.CER C1005 JB 1E 103K-T	T	32.8/35.6
C125	4030013880	S.CER C1005 JB 1H 222K-T	T	31.6/34.2
C126	4030013880	S.CER C1005 JB 1H 222K-T	T	32.8/34.7
C127	4030019740	S.CER C1005 JB 1H 102K-T	T	49/40.2
C128	4030019930	S.CER C1005 JB 1A 104K-T	B	27/31.8
C131	4030019810	S.CER C1005 JB 1E 103K-T	T	20.5/31.9
C132	4030019790	S.CER C1005 JB 1H 562K-T	T	25.6/33.6
C133	4030019930	S.CER C1005 JB 1A 104K-T	T	23.5/33.3
C134	4030019690	S.CER C1005 CH 1H 221J-T	T	25.1/31.7
C135	4030019700	S.CER C1005 JB 1H 271K-T	T	32/26.3
C136	4030019790	S.CER C1005 JB 1H 562K-T	T	35.2/25.1
C137	4030019880	S.CER C1005 JB 1A 333K-T	T	34.3/25.1
C138	4030019740	S.CER C1005 JB 1H 102K-T	B	12.6/23
C139	4030019970	S.CER C1005 JB 0J 105K-T	B	16/32
C141	4030019490	S.CER C2012 JB 1A 106K-T	B	28.6/28.9
C143	4030019740	S.CER C1005 JB 1H 102K-T	B	17.5/5.5
C144	4030019740	S.CER C1005 JB 1H 102K-T	B	93/22.6
C145	4030019490	S.CER C2012 JB 1A 106K-T	B	17.3/40.6
C147	4030019900	S.CER C1005 JB 1A 473K-T	B	31.9/45.9
C148	4030019740	S.CER C1005 JB 1H 102K-T	T	40.1/3.4
C150	4030019900	S.CER C1005 JB 1A 473K-T	B	11.9/40.1
C151	4030019960	S.CER C1005 JB 0J 474K-T	B	19.2/41.6
C152	4030019930	S.CER C1005 JB 1A 104K-T	B	10.3/40.1
C153	4520000020	S.NIO NOJC227M006	T	12/42.5
C154	4030019490	S.CER C2012 JB 1A 106K-T	B	27.2/41.3
C156	4520000020	S.NIO NOJC227M006	T	19.6/36.6
C157	4030019740	S.CER C1005 JB 1H 102K-T	B	33.9/42.2
C158	4030019740	S.CER C1005 JB 1H 102K-T	B	29.7/27.2
C161	4030019810	S.CER C1005 JB 1E 103K-T	B	69/41
C162	4030019810	S.CER C1005 JB 1E 103K-T	B	67.3/10.2
C165	4030019740	S.CER C1005 JB 1H 102K-T	T	15.8/46.4
C166	4030019740	S.CER C1005 JB 1H 102K-T	B	26/47.9
C169	4030019740	S.CER C1005 JB 1H 102K-T	T	28/43
C170	4030019490	S.CER C2012 JB 1A 106K-T	B	28.1/45.4
C171	4030019930	S.CER C1005 JB 1A 104K-T	B	12.8/38.3
C173	4510009870	S.ELE 10 CE 100 LD	T	8.8/28.3
C174	4030019490	S.CER C2012 JB 1A 106K-T	B	67.8/43.9
C179	4030019810	S.CER C1005 JB 1E 103K-T	T	28.9/26.3
C180	4030019740	S.CER C1005 JB 1H 102K-T	B	48.6/44.5
C181	4030019490	S.CER C2012 JB 1A 106K-T	T	54.6/38.8
C182	4030019930	S.CER C1005 JB 1A 104K-T	B	43.6/37.4
C183	4030019930	S.CER C1005 JB 1A 104K-T	B	42.7/42.8
C193	4030009740	S.CER C1005 CH 1H 100C-T	B	75.6/12.5
C194	4030009760	S.CER C1005 CH 1H 150J-T	B	83.3/12.5
C195	4030009770	S.CER C1005 CH 1H 220J-T	B	81.7/11.5
C197	4030019930	S.CER C1005 JB 1A 104K-T	B	83/6.7
C199	4030019930	S.CER C1005 JB 1A 104K-T	B	82.6/18.7
C204	4030019740	S.CER C1005 JB 1H 102K-T	T	14.7/7.9
C205	4030019740	S.CER C1005 JB 1H 102K-T	B	15/11.7
C209	4030019970	S.CER C1005 JB 0J 105K-T	B	20.2/45.9
C210	4030019930	S.CER C1005 JB 1A 104K-T	B	20.6/43.1
C212	4030019810	S.CER C1005 JB 1E 103K-T	T	35.8/28.8
C213	4030019620	S.CER GRM188B31C225KE14D	T	35.7/30.2
C216	4030019900	S.CER C1005 JB 1A 473K-T	B	88.6/18.3
C217	4030019930	S.CER C1005 JB 1A 104K-T	T	33.7/36.8
C219	4030019810	S.CER C1005 JB 1E 103K-T	B	86.1/18.3
C220	4030019850	S.CER C1005 JB 1E 183K-T	B	24.4/42.5
C221	4030019850	S.CER C1005 JB 1E 183K-T	B	24.7/41.3

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REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C222	4030009800	S.CER C1005 JB 1H 471K-T	B	22/32.5
C223	4030019930	S.CER C1005 JB 1A 104K-T	B	25.5/38.7
C224	4030019930	S.CER C1005 JB 1A 104K-T	B	20.5/38.4
C226	4030013880	S.CER C1005 JB 1H 222K-T	B	23.6/32.5
C230	4030019870	S.CER C1005 JB 1A 273K-T	B	94.8/26.5
C232	4030019930	S.CER C1005 JB 1A 104K-T	T	54.6/37.4
C236	4030019810	S.CER C1005 JB 1E 103K-T	B	29.3/38.7
C241	4030019930	S.CER C1005 JB 1A 104K-T	T	47.8/26
C244	4030019810	S.CER C1005 JB 1E 103K-T	B	30.2/38.7
C245	4030019810	S.CER C1005 JB 1E 103K-T	B	93.8/20.3
C249	4030019810	S.CER C1005 JB 1E 103K-T	T	47.2/41.6
C251	4030019740	S.CER C1005 JB 1H 102K-T	B	18.6/17.5
C252	4030019740	S.CER C1005 JB 1H 102K-T	B	16.6/16.3
C277	4030009780	S.CER C1005 CH 1H 270J-T	B	9.4/25.6
C278	4030009760	S.CER C1005 CH 1H 150J-T	B	16.1/9
C280	4030019740	S.CER C1005 JB 1H 102K-T	B	19.9/10.2
C281	4030007030	S.CER C1608 CH 1H 150J-T	B	20.2/8.5
C282	4030019740	S.CER C1005 JB 1H 102K-T	B	78.1/5.7
C283	4030019740	S.CER C1005 JB 1H 102K-T	T	12.8/31.5
C285	4030007110	S.CER C1608 CH 1H 680J-T	B	21.4/9.4
C287	4030009760	S.CER C1005 CH 1H 150J-T	B	18.5/9
C289	4030019740	S.CER C1005 JB 1H 102K-T	B	25/15.9
C290	4030011640	S.CER C1005 CH 1H 010B-T	B	18.3/13.4
C292	4030011640	S.CER C1005 CH 1H 010B-T	B	16.1/13.4
C293	4030019930	S.CER C1005 JB 1A 104K-T	B	55/29.7
C298	4030019490	S.CER C2012 JB 1A 106K-T	T	30.5/12.9
C300	4030019740	S.CER C1005 JB 1H 102K-T	B	52.3/19.9
C301	4030019740	S.CER C1005 JB 1H 102K-T	B	67.3/11.2
C303	4030019740	S.CER C1005 JB 1H 102K-T	B	50.9/44
C304	4030019900	S.CER C1005 JB 1A 473K-T	T	24/35.4
C368	4030011630	S.CER C1005 CH 1H 0R5B-T	B	43.2/10.6
C369	4030019880	S.CER C1005 JB 1A 333K-T	T	51.1/42.3
C370	4030013880	S.CER C1005 JB 1H 222K-T	T	53.2/42.9
C372	4030019880	S.CER C1005 JB 1A 333K-T	T	52.3/44
C373	4030019800	S.CER C1005 JB 1H 682K-T	T	54.1/42.9
C374	4030013880	S.CER C1005 JB 1H 222K-T	T	55/44
C376	4030019740	S.CER C1005 JB 1H 102K-T	B	82.8/3.1
C377	4030019490	S.CER C2012 JB 1A 106K-T	B	85.3/6.5
C378	4030019930	S.CER C1005 JB 1A 104K-T	B	83.9/6.7
C379	4030019740	S.CER C1005 JB 1H 102K-T	B	81.6/7.4
C380	4030019490	S.CER C2012 JB 1A 106K-T	B	72.6/12.5
C381	4030019490	S.CER C2012 JB 1A 106K-T	B	81.4/3.5
C385	4030019770	S.CER C1005 JB 1H 332K-T	B	54.4/45.6
C386	4030014260	S.CER C1005 JB 1H 331K-T	B	56.5/46.5
C389	4030019740	S.CER C1005 JB 1H 102K-T	T	49.7/27.6
C391	4030019930	S.CER C1005 JB 1A 104K-T	T	52.1/36.6
C392	4550007480	S.TAN F930J106MAABMA	B	44.6/33.2
C393	4550006110	S.TAN TEESVB2 0J 336M8R	B	48.4/34.8
C394	4030019740	S.CER C1005 JB 1H 102K-T	T	50.8/35.2
C395	4030019930	S.CER C1005 JB 1A 104K-T	T	52.1/37.5
C397	4030019740	S.CER C1005 JB 1H 102K-T	T	52.4/26
C398	4030019490	S.CER C2012 JB 1A 106K-T	B	66.7/5.6
C456	4030009770	S.CER C1005 CH 1H 220J-T	B	45.6/8.5
C457	4030009780	S.CER C1005 CH 1H 270J-T	B	45.3/9.7
C458	4030019740	S.CER C1005 JB 1H 102K-T	B	47.4/9.2
C459	4030019740	S.CER C1005 JB 1H 102K-T	B	47.1/14.1
C460	4030009720	S.CER C1005 CH 1H 080C-T	B	47.3/10.4
C461	4030019740	S.CER C1005 JB 1H 102K-T	B	50/9.8
C462	4030019740	S.CER C1005 JB 1H 102K-T	B	54.7/8.9
C463	4030019740	S.CER C1005 JB 1H 102K-T	B	74.3/19.3
C464	4030011630	S.CER C1005 CH 1H 0R5B-T	B	48.4/12.5
C465	4030019740	S.CER C1005 JB 1H 102K-T	B	50.1/15.1
C466	4030019930	S.CER C1005 JB 1A 104K-T	B	71.2/18.7
C471	4030019930	S.CER C1005 JB 1A 104K-T	T	44.9/25.8
C775	4030019740	S.CER C1005 JB 1H 102K-T	T	51.5/25.3
C776	4030013910	S.CER C1005 JB 1H 472K-T	B	90.3/35.2
C777	4030013910	S.CER C1005 JB 1H 472K-T	B	90.3/34.3
C778	4030019950	S.CER C1005 JB 0J 224K-T	B	91.8/28
C779	4030019950	S.CER C1005 JB 0J 224K-T	B	91.8/27.1
C780	4030019950	S.CER C1005 JB 0J 224K-T	B	91.5/25.9
C782	4030019900	S.CER C1005 JB 1A 473K-T	B	19.6/38.4
C783	4030019860	S.CER C1005 JB 1E 223K-T	T	18/32
C784	4550000270	S.TAN TEESVA 1E 474M8R	B	54.1/13.7
C785	4030019740	S.CER C1005 JB 1H 102K-T	B	58.9/29.9
C786	4030019810	S.CER C1005 JB 1E 103K-T	B	57.7/30.3
C787	4030009780	S.CER C1005 CH 1H 270J-T	B	13.6/9.6
C788	4030009760	S.CER C1005 CH 1H 150J-T	B	14/10.8
J2	6450000131	CON HSJ1102-018540		
J3	6510025880	CON TC38-108-01 <CFE>		
J6	6510021901	S.CON BM02B-ASRS-TF(LF)(SN)	T	27.6/36.4
DS1	5030003270	LCD TAK-35426 FX3254 <ITAK>		
DS2	5040003500	S.LED HT-191 UYG-K828 <SHO>	T	48.3/4.3
DS3	5040003500	S.LED HT-191 UYG-K828 <SHO>	T	53/4.3
MC1	7700002940	MIC EM6027P-45C33-G <HOR>		
S3	2260001900	SWI SW-149 (SKHLLD)		
S801	7600000210	ENC TP70N00E20-15F-1903		
EP2	8930080320	LCD SRCN-3254-SP-N-W (SHJ)		
EP4	6910012350	S.BEA MMZ1608Y 102BT	T	34.2/11.6
EP5	6910018460	S.BEA MMZ1005Y102C-T	B	21.8/48.1
EP6	6910014640	S.BEA MPZ2012S221A-T	B	21.9/18.4
EP10	6910018460	S.BEA MMZ1005Y102C-T	B	34.9/43.5
EP11	6910018460	S.BEA MMZ1005Y102C-T	B	19.3/45
EP12	6910018460	S.BEA MMZ1005Y102C-T	T	54.7/32.5

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

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SECTION 7 MECHANICAL PARTS

[CHASSIS PARTS]

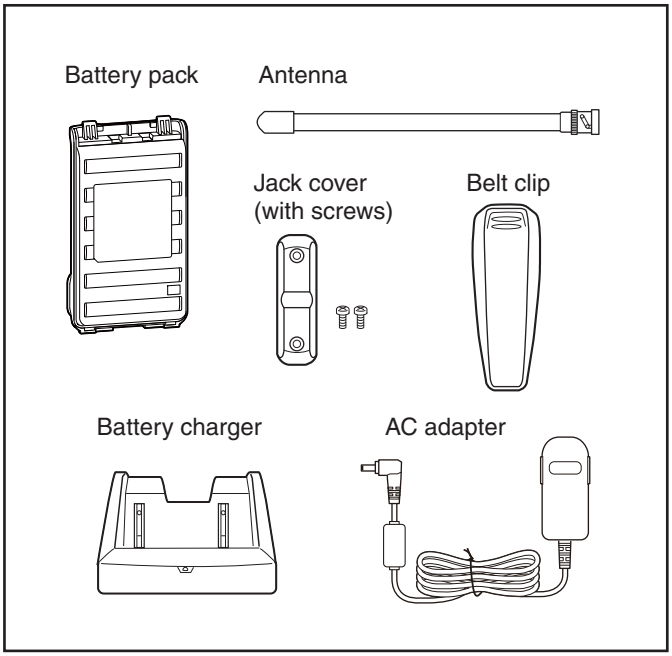
REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6510027690	BNC-R170 (A)	1
SP1	2510001550	K036NA511-10	1
W1	8900016360	OPC-1190A	1
EP1	0910066440	B-7318	1
MP1	8010021710	3285 CHASSIS	1
MP2	8930079900	3285 TERMINAL HOLDER	1
MP3	8930080100	3285 PLUS TERMINAL	1
MP4	8210025800	3285 BOTTOM PANEL	1
MP5	8930079890	3285 LOCK PLATE	1
MP6	8930079960	3254 PTT RUBBER	1
MP7	8930079880	3254 PTT BUTTON	1
MP8	8930080150	3285 SIDE SEAL	1
MP9	8930080400	3285 MINUS TERMINAL	1
MP10	8930080090	3285 SIDE PLATE	1
MP11	8930080380	3285 SHAFT	1
MP12	8610009240	KNOB SPRING NO.7800P	1
MP13	8930080650	SP NET (G)	1
MP14	8930046020	1123 SHEET (A)-1	1
MP15	8930080250	3254 MIC SPONGE	1
MP16	8930069710	THERMALLY SHEET (BC)	1
MP17	8830003430	3254 ANT NUT	1
MP18	8830003390	VR NUT (AB)	1
MP19	8210026120	3254 FRONT PANEL (A) (Incl. MP4–7, 11,13, 20) [V80E]	1
MP19	8210026130	3254 FRONT PANEL (Incl. MP4–7, 11,13, 20) [V80]	1
MP20	8210025940	3254 PTT PANEL	1
MP21	8310075620	3254 WINDOW PLATE	1
MP22	8610014170	KNOB N-391 (Incl. MP12)	1
MP23	8930080270	3254 WINDOW SHEET	1
MP24	8930080280	3254 TOP SEAL	1
MP25	8930080300	3254 KEYBOARD	1
MP26	8810009511	SCREW BT B0 2X4 NI-ZC3 (BT)	9
MP27	8810009511	SCREW BT B0 2X4 NI-ZC3 (BT)	1
MP28	8810008641	0TAP 1FLAT WASHER B0 2X4 NI-ZC3 (BT)	2
MP29	8810008761	SCREW BT B0 2X8 NI-ZC3 (BT)	2
MP30	8850001950	SEALING WASHER (Y)	1
MP32	8930080240	3254 SP HOLDER	1

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J2	6450000131	HSJ1102-018540	1
J3	6510025880	TC38-108-01	1
J6*	6510021901	BM02B-ASRS-TF (LF) (SN)	1
DS1	5030003270	TAK-35426	1
MC1	7700002940	EM6027P-45C33-G	1
S3	2260001900	SW-149 (SKHLLD)	1
S801	7600000210	TP70N00E2015F-1903	1
EP2	8930080320	SRCN-3254-SP-N-W	1
MP1*	8510019610	3254 VCO CASE	1
MP2	8510019600	3254 VCO COVER	1
MP3	8930080290	3254 LCD HOLDER	1
MP4	8210025950	3254 REFLECTOR	1
MP5	8930080260	3254 WHITE SHEET	1

[ACCESSORIES]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
EP1	3310002840	FA-B2E	1
EP2	(Optional)	BP-264 EXP [EUR-21], [UK-01], [USA-11], [AUS-21], [EXP-11], [EXP-21], [EUR-22], [UK-02], [USA-12], [KOR-02], [AUS-22], [EXP-12], [EXP-22]	1
	(Optional)	BP-265 [EUR-23], [UK-03], [USA-13], [AUS-23], [EXP-13], [EXP-23]	1
EP3	(Optional)	BC-191 EXP Except [EUR], [USA], [CHN], [EXP]	1
EP4	(Optional)	BC-123SE [EUR-21], [EXP-21], [EUR-23], [EXP-23]	1
	(Optional)	BC-123SA [USA-11], [EXP-11], [USA-13]	1
	(Optional)	BC-123SV [AUS-21], [AUS-23]	1
	(Optional)	BC-147SE [EUR-22], [EXP-22]	1
	(Optional)	BC-147SA [USA-12], [EXP-12]	1
	(Optional)	BC-147SV [AUS-22]	1
	(Optional)	BC-123SA [EXP-13]	1
EP5	(Optional)	BP-263 [EUR], [USA], [EXP]	1
MP1	(Optional)	MB-124 Except [CHN]	1
MP2	8210025840	3285 JACK PANEL	1
MP3	8810004861	SCREW PH M2X6 ZK3	2



*: Refer to "**BOARD LAYOUTS**" for the location.

Screw abbreviations A, B0, BT: Self-tapping PH: Pan head ZK: Black NI-ZU: Nickel-Zinc SUS: Stainless

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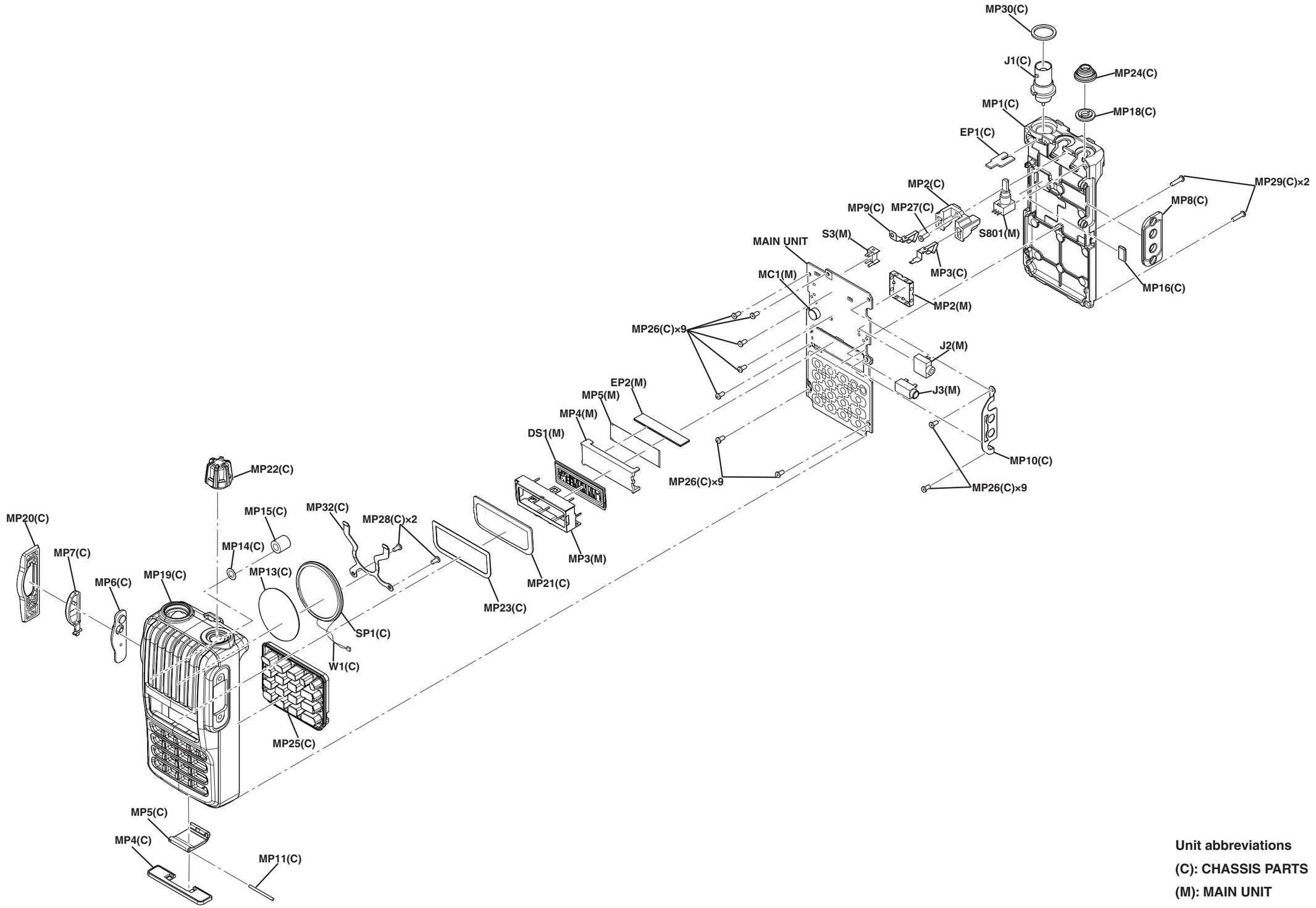

Unit abbreviations

(C): CHASSIS PARTS

(M): MAIN UNIT

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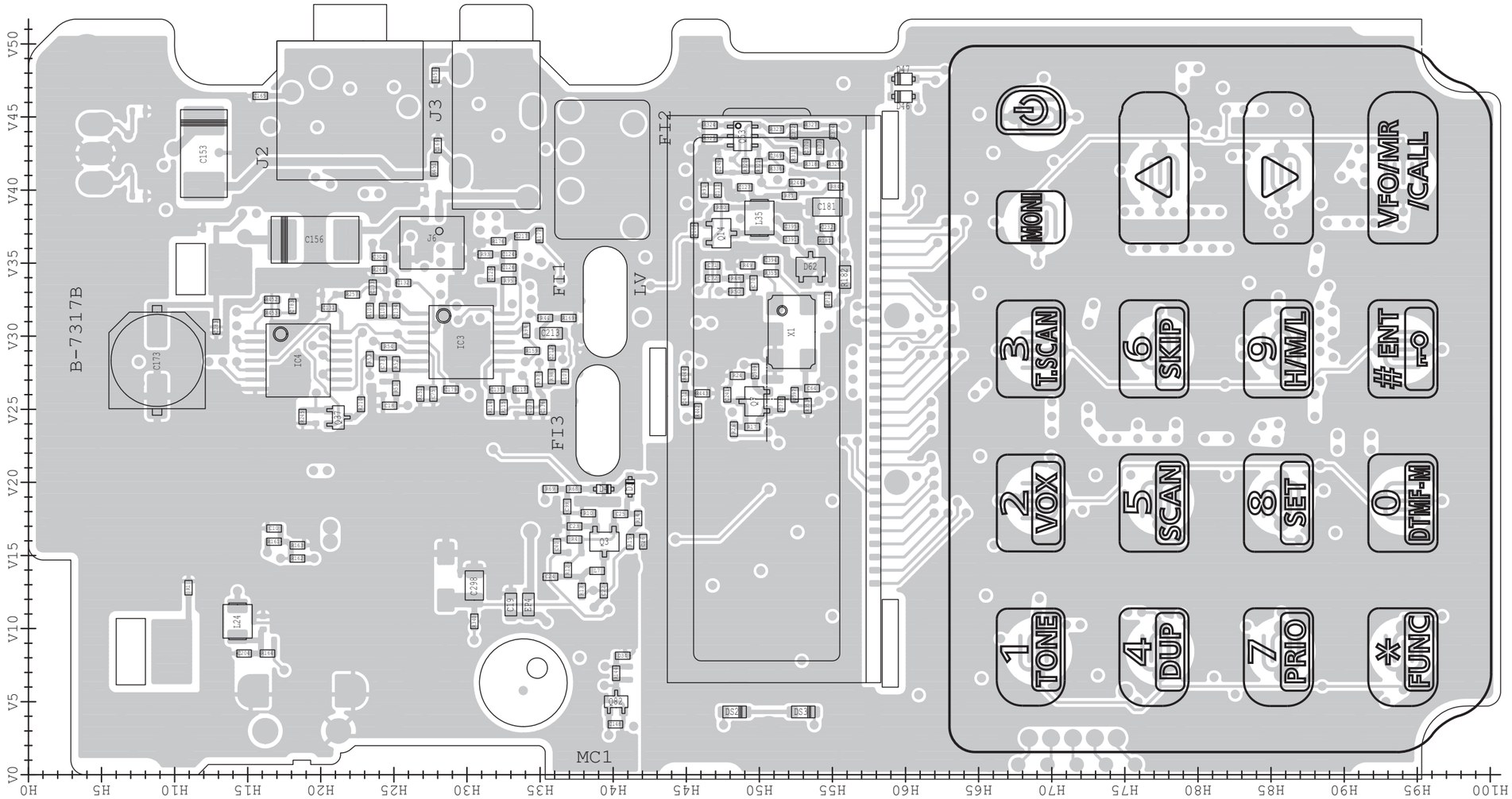
The combination of top side and bottom side of this page shows the actual configuration of P.C. board.

• MAIN UNIT (TOP VIEW)



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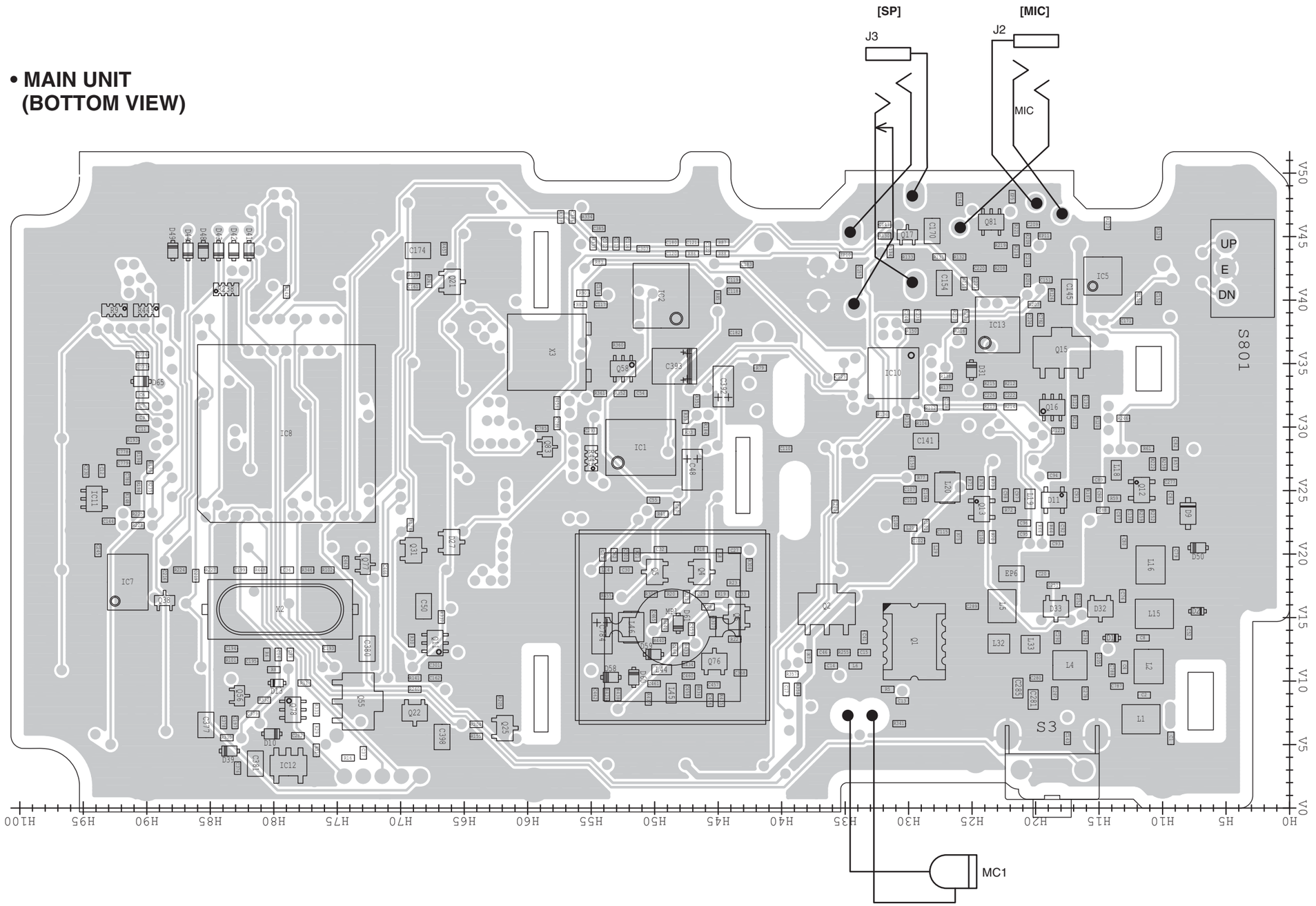
The combination of top side and bottom side of this page shows the actual configuration of P.C. board.

• MAIN UNIT (BOTTOM VIEW)



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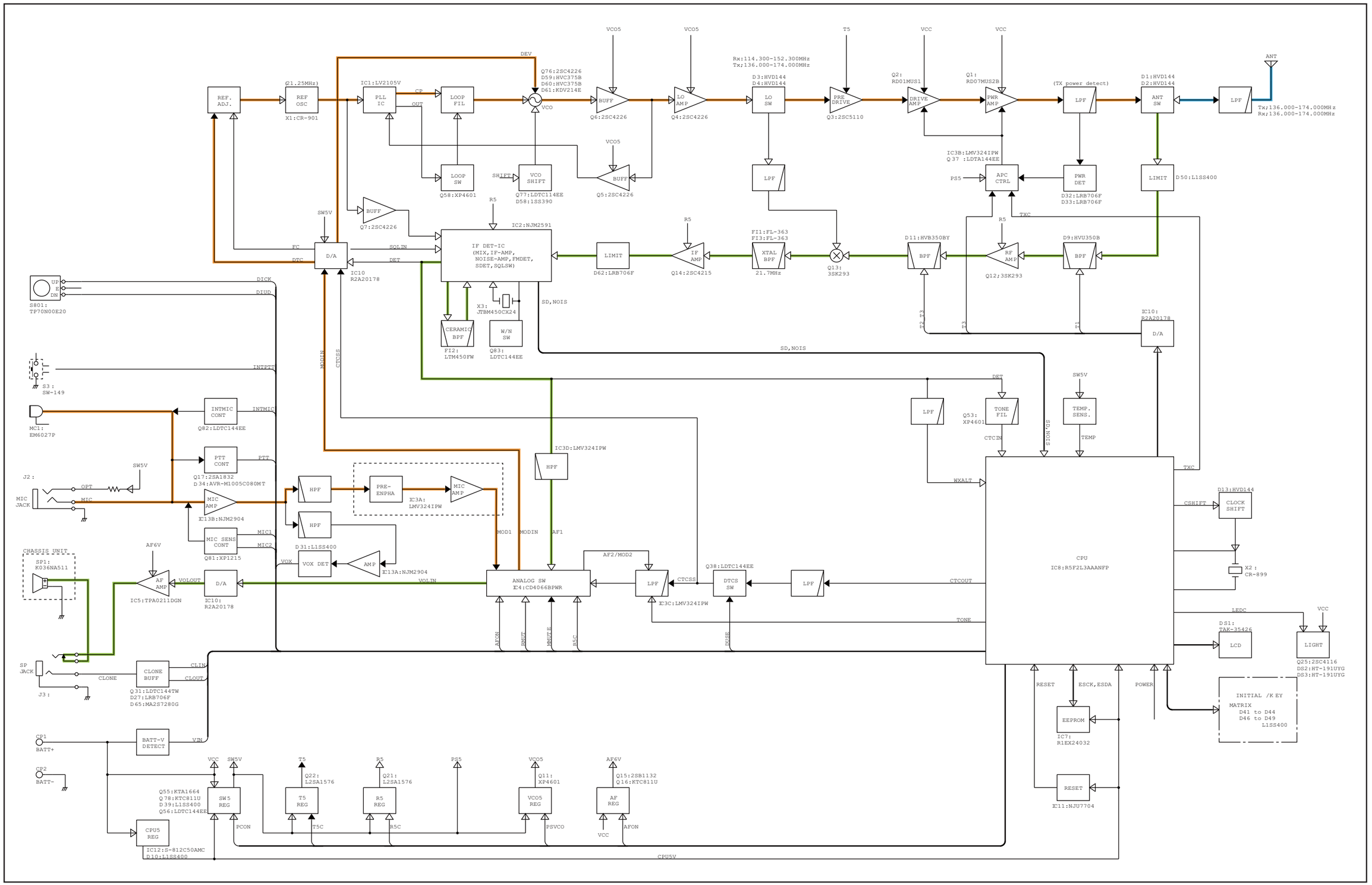
SECTION 9 BLOCK DIAGRAM



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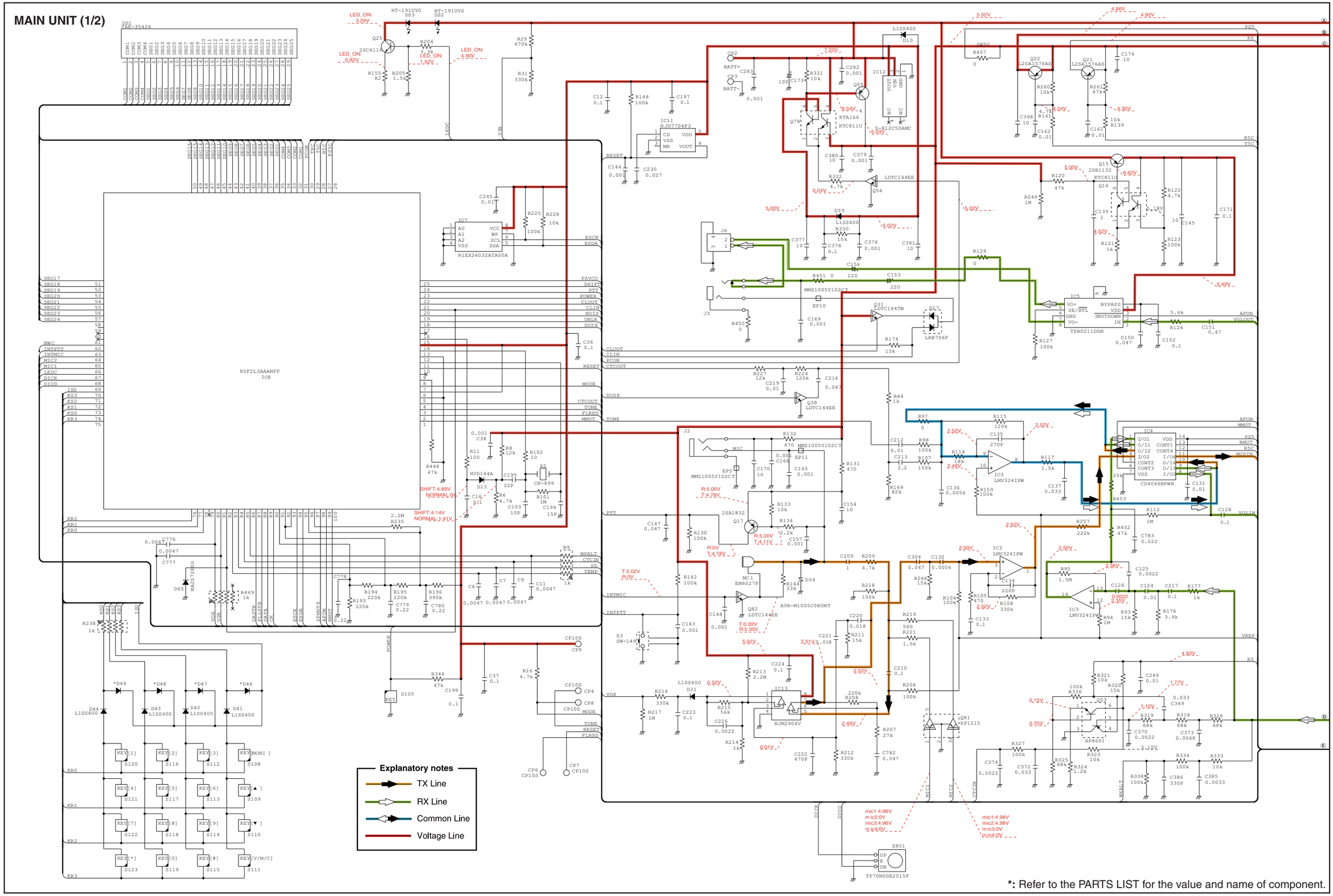
SECTION 10 VOLTAGE DIAGRAM

MAIN UNIT (1/2)



***:** Refer to the PARTS LIST for the value and name of component.

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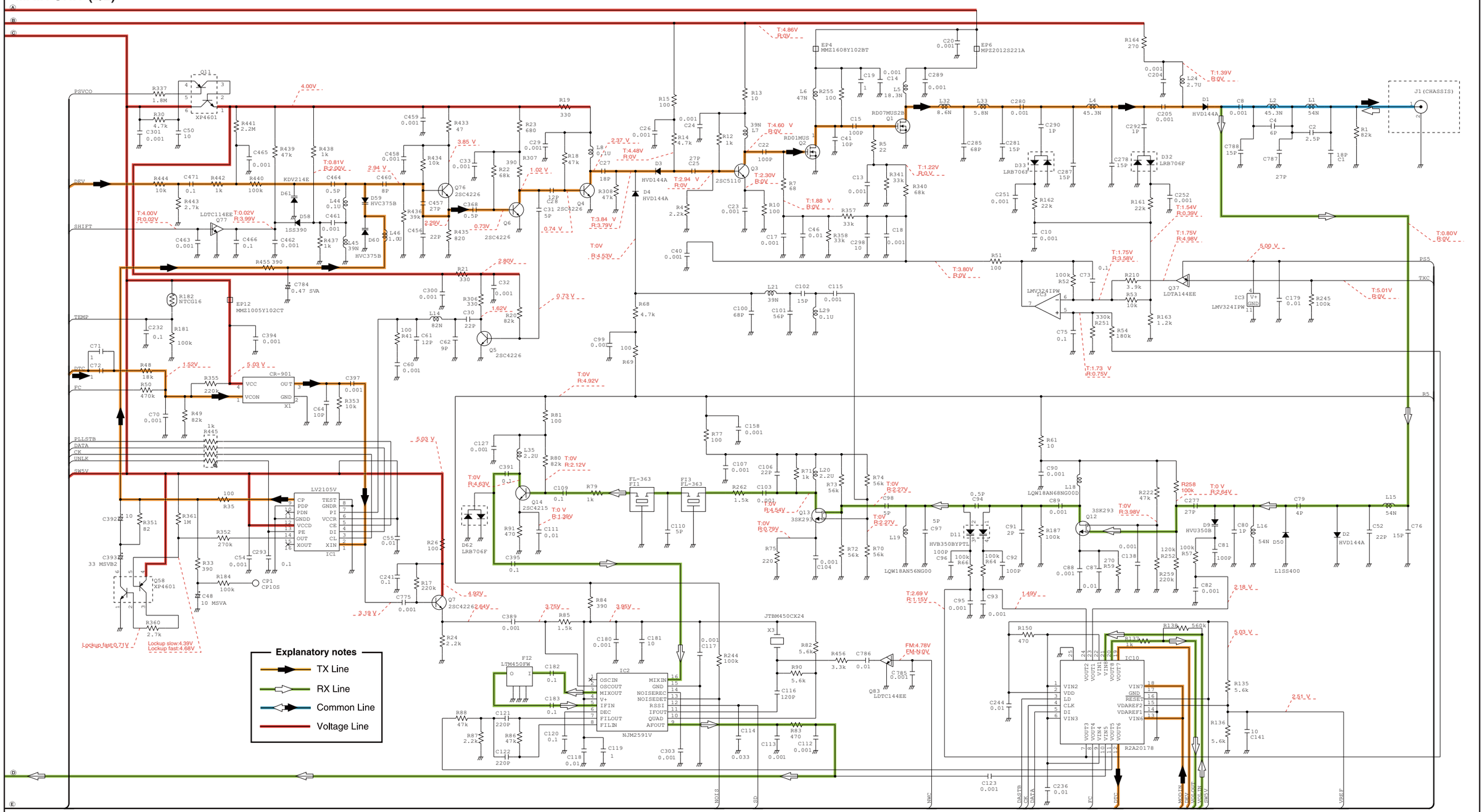
MAIN UNIT (2/2)



*: Refer to the PARTS LIST for the value and name of component.

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